# DEFENSE INFORMATION SYSTEMS AGENCY FY 1997 PRESIDENT'S BUDGET ESTIMATES



# EVELOPMENT, TEST AND EVALUATION (RDT&E) RESEARCH, D

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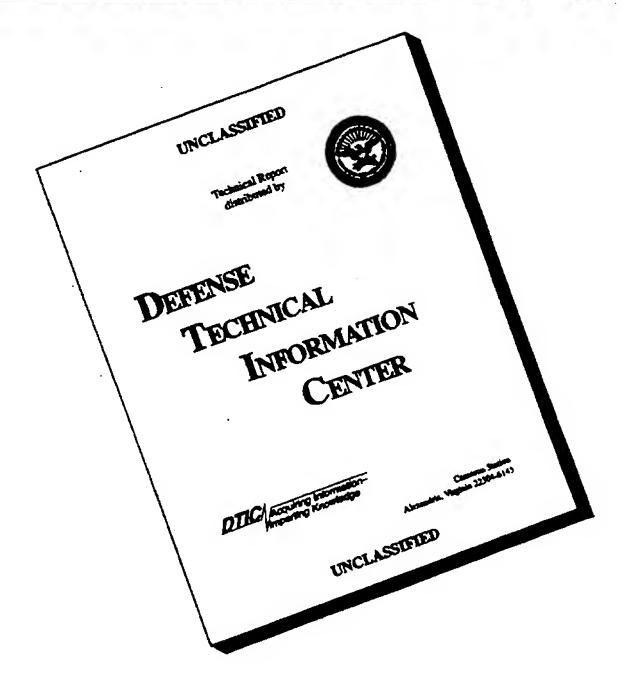
ND R-3 EXHIBITS R-1, R-2, A

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MARCH 1996

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### PROGRAM ELEMENT COMPARISON SUMMARY INTRODUCTION AND EXPLANATION OF CHANGES

- 1. <u>General</u>. This document has been prepared to provide summary information on the DISA Research, Development, Test and Evaluation Program to congressional committees during the FY 1997 hearings. The R-2 and R-3 exhibits provide narrative information on all RDT&E Program Elements and projects.
- 2. Comparison of FY 1995 and 1996 Data. A direct comparison of FY 1995 and FY 1996 data in the R-1 exhibit dated February 1995 will reveal only changes reflecting below threshold reprogrammings and Congressional action on the appropriation request.
- 3. Relationship of FY 1997 Budget Structure to the FY 1996
  Budget Approved by Congress. The FY 1997 budget request reflects
  two new program elements: 0303129K (Defense Message System) and
  0303149K (C4I for the Warrior). Funding for the Defense Message
  System is a realignment of work which was previously included in
  0303126K (Long Haul Communications). Funding included in C4I for
  the Warrior represents a new effort.
- 4. <u>Classification</u>. All exhibits in this document are unclassified.

## DEFENSE INFORMATION SYSTEMS AGENCY FY 1997 PRESIDENT'S BUDGET ESTIMATE

# RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

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## DEFENSE INFORMATION SYSTEMS AGENCY FY 1997 PRESIDENT'S BUDGET ESTIMATES

### R-1 EXHIBIT

Program Element	FY 1995	FY 1996	FY 1997
0305108K C2 Research	1,640	1,819	1,856
Total Applied Research (BA 2)	1,640	1,819	1,856
0604889K Counterdrug Engineering	200	0	0
Total Engineering & Manufac. Dev. (BA 5)	200	0	0
0208045K C3 Interoperability	32,451	23,192	24,268
0302016K NMCS-Wide Support	3,536	1,995	2,047
0302019K Joint/Def. Info. Sys. Engin. & Integ.	9,774	3,745	4,594
0303126K Long Haul Communications	27,166	20,060	23,361
0303127K Support of the Nat. Comm. Sys. (NCS)	4,229	3,733	3,910
0303129K Defense Message System (DMS)	0	0	2,532
0303131K Min. Essen. Emerg. Comm. Netw. (MEECN)	3,237	2,620	2,311
0303149K C4I for the Warrior	0	0	2,907
0303153K Joint Spectrum Center	0	4,712	0
Total Operational Systems Develop. (BA 7)	80,393	60,057	65,930
TOTAL DISA RDT&E	82,533	61,876	981,78

							DATE: March 1996	ո 1996	
RDT&E BUDGET ITEM JUSTI	TTEM JUSTIF	FICATION SHEET (R-2 Exhibit)	SHEET (F	(-2 Exhibit)					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02				R-1 ITEM N C2 Research/I	R-1 ITEM NOMENCLATU C2 Research/P.E. 0305108K	URE			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Total 0305108K Cost	1.640	1.819	1.856	1.944	2.024	2.087	2.153	Contg	Contg
Project A: Command and Control Research, A10	1.640	1.819	1.856	1.944	2.024	2.087	2.153	Contg	Contg

A. Mission Description and Budget Item Justification:

a scientific discipline, foster joint service techbase cooperation and demonstrations, and develop a C2 curriculum This program element represents DISA's portion of a joint DISA/multi-service effort that supports research into emerging technologies, methodologies and theories of military command and control (C2), the application of research results to resolve the problems of C2 associated with joint operations and to foster optimal use of MILDEP laboratory resources. Accordingly, this program element is located in Budget Activity 02. The C2 research program was initiated to develop C2 as for DOD

development of curricula for National Defense University, Naval Post Graduate School, and the Service war colleges. It addresses joint techbase issues including joint distributed ADP, Joint War ne project consists of research and studies for high level issues in command and control, and the The project supports command and control basic research and Applied Research. Th Gaming and technology sharing.

## FY1995 Accomplishments

- o Continued coordinating and managing the Joint Service C3 Science and Technology Programs, developing annual Joint Service Program Plan for C3 Research and supporting the development and execution of the Deputy Director of Research and Engineering (DDR&E) Enhanced Advanced Technology Demonstrations (EATDs) (\$250K) (AUG 95)
  - o Continued development and demonstration of Distributed Computing Environment (DCE) capabilities in data bases, Multi-Level Security, data fusion, and address these issues in the Global Grid DCE. (\$595K) (SEP 95)
- o Continued C3, Decision Aids and Data Fusion Symposia and the information exchange through the TPC3 subpanels. Continue to explore the possibility of formally expanding into the international Symposium. (\$300K) (JUNE 95)
  - o Continued basic and applied research in C2 architecture's theory and analysis tools. Continue basic and applied research in Conditional Event Probability Algebraic Logic and its application to the C2 process. (\$245K) (SEP 95)
    - analysis and studies of high level C3 issues (\$250K) (SEP 95) o Continued curricula for National Defense University and other DOD schools and \$1.640M Total

Page 1 of 3

RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	CATION SH	EET (R-2 E	chibit)			DATE: March 1996	հ 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02				R-1 ITEM N C2 Research/	R-1 ITEM NOMENCLATURE C2 Research/P.E. 0305108K	URE			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Total 0305108K Cost	1.640	1.819	1.856	1.944	2.024	2.087	2.153	Contg	Contg
Project A: Command and Control Research, A10	1.640	1.819	1.856	1.944	2.024	2.087	2.153	Contg	Contg

### FY1996 Plans:

- o Continue coordinating and managing the Joint Service C3 Science and Technology Programs, developing annual Joint Service Plan for C3 Research. Support the development and execution of the Deputy Director of Research and Engineering (DDR&E) Advanced Concepts Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstrations (JWID). (\$202K)
- o Continue development and demonstration within the Global Grid testbed environment of Multi-level Security and data fusion. (\$275K) (SEP 96)
- Continue basic research in Conditional Event Probability Algebraic Logic (CEPAL) and its application to the C3 Continue C3, Decision Aids and Data Fusion Symposia and the information exchange through TPC3 subpanels. Formalize the expansion into the international arena. (\$453K) (SEP 96) o Continue basic and applied research in C2 architecture's theory and analysis tools.
- o Continue C2 curricula for National Defense University and other DOD schools and analysis and studies of high level C3 issues. (\$322K) (SEP 96) \$1.819M Total

### FY1997 Plans:

process (\$567K) (SEP 96)

- o Continue coordinating and managing the Joint Service C3 Science and Technology Programs, developing annual Joint Service Plan for C3 Research. Support the development and execution of Technology Demonstrations (ACTDs) using the Joint Warfare Information Demonstrations (JWID). (\$100K) the Deputy Director of Research and Engineering (DDR&E) Advanced Concepts
- o Continue demonstration within the Global Grid testbed environment of DCE capabilities in Multi-Media, distributed data bases, Multi-level Security and data fusion. Incorporate research into JWID arena for demonstration. (\$141K) (SEP 97)
  - o Continue C3, Decision Aids and Data Fusion Symposia and the information exchange through the TPC3 subpanels. Formalize the expansion into the international arena. Hold first international C3 Symposia in Europe. (\$355K) (JUNE 97)
- Continue basic research in Conditional Event Probability Algebraic Logic and its application to the C3 process. Continue basic and applied research in C2 architecture's theory and analysis tools. (\$510K) (SEP 97)
- o Continue C2 curricula for National Defense University and other DOD schools analysis and studies of high level C3 issues (\$750K) (SEP 97) \$1.856M Total

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	RDT&E BUDGET ITEM JUSTIFICATION SHEET	TEM JUST	FICATIO		(R-2 Exhibit)			DATE: March 1996	, 9661 h	
A. B.	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/02				R-1 FTEM NOMENCLA C2 Research/P.E. 0305108K	OMENCLA E. 0305108K	NTURE			
	COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Pro Res	Project A: Command and Control Research, A10	1.640	1.819	1.856	1.944	2.024	2.087	2.153	Contg	Contg
В.	Program Change Summary									
	Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value				E 1 1 8	FY95 1.687 1.687 (.047)		FY96 1.999 1.999 (.180)	F. 2.	FY97 2.110
	Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation:	s Budget			1.0	1.640	•	1.819	U T	(.254) 1.856
	Funding: FY95 reduction due to Congressional rescission. FY96 reduction due to undistributed Congressional adjustment. FY96 reduction due to revised inflation guidance.	ljustment.								
	Schedule: N/A Technical: N/A									
ပ	Other Program Funding Summary N/A									*
<u>4636363</u>	<ul> <li>D. Schedule Profile</li> <li>(U) FY 1995</li> <li>(U) FY 1996</li> <li>(U) FY 1996</li> <li>(U) FY 1996</li> <li>(U) FY 1997</li> <li>(U) FY 1997</li> <li>(U) FY 1997</li> <li>(U) FY 1997</li> <li>(D) FY 1997</li> </ul>									
				Page 3 of 3						

RDT&E BUDGET ITEM JUSTI	EM JUSTIF	FICATION SHEET (R-2 Exhibit)	SHEET (R	-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM I	R-1 ITEM NOMENCLA C3 Interoperability 020804	TURE 15K			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
PE: 0208045K	32.451	23.192	24.268	25.313	26.297	27.885	29.547	Contg	Contg
T20 Center for Standards	2.943	2.185	1.582	1.639	1.687	1.851	2.001	Contg	Contg
T80 Technology Assessment and Insertion	*0	.571	.563	.584	.601	.658	.712	Contg	Contg
T30 Test and Evaluation	20.679	13.080	14.449	15.081	15.665	16.516	17.466	Contg	Contg
T40 Major Range and Test Facility Base (MRTFB)	8.829	7.356	7.674	8.009	8.344	8.860	9.368	Contg	Contg

A. Mission Description & Budget Item Justification:

To ensure interoperability and integration of Command, Control, Communications and Intelligence (C3I) systems through development and maintenance of a joint global architecture, interface and system standards, interface definitions, operational procedures and a test and certification program for C3 systems; and to function as an Operational Test Agency (OTA) to test/certify the Defense Information Systems Network (DISN), Defense Message System (DMS), and other strategic systems. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

\*This project is not a new start but has evolved from an existing effort in Project T30, Test and Evaluation.

RDT&E BU	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION S	HEET (R-2	Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N C3 Interopera	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20	TURE 5K/Center for	Standards/T2	0	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T20 Center for Standards	2.943	2.185	1.582	1.639	1.687	1.851	2.001	Contg	Contg

development of standards within DOD and encourage industry adoption of standards supporting DOD requirements. When commercially available standards exist, they will be adopted. The Center will candidate technologies for advanced technology demonstrations, and develop the roadmap and business case A. Mission Description & Budget Item Justification: The Center serves as DOD Executive Agent for centralized management of Information Technology standards. The primary goal is to guide manage development of DOD unique requirement efforts. The Center will also select analyses for transitioning technologies into leading edge services.

### (U) FY 1995 Plans:

- Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profile selection support for DOD systems; (Ongoing;
- Review Joint Pub 6-05, Manual for Employing Joint Tactical Communications to incorporate Joint Task Force (JTF) requirements; (Ongoing; \$275K).
  - Approve MIL-STD-198-700A, Interoperability and Performance Standards for the Defense Information System; (Nov 94; \$67K)
    - Complete MIL-STD-188-221, Tactical Radio Data Link Waveform Standard; (Sep 95; \$186K).

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- Publish MIL-STD-188-136, MIL-STD-700B, Interoperability and Performance Standards for the Defense Information System; (Jun 95; \$135K)
  - Provide technical support to Principal US Representative to NATO Subgroups, SG/9, SG/11 and SG/6; (Ongoing; \$327K).
    - Validate Ultra High Frequency (UHF) satellite standards; (Jun 95; \$353K).
- Revise MIL-STD-187-700, Interoperability and Performance Standards for the Defense Information Systems, to stay abreast with technological advancements; (Sep 95; \$120K).
  - Complete draft MIL-STD-188-331A on multipoint VTC systems and submit for testing; (Dec 94; \$110K).
    - Revise MIL-STD-188-194, Integrated Services Digital Network (ISDN) Profile; (Ongoing; \$128K).
- Complete development of EHF Medium Data Rate (MDR) Standard, MIL-STD-188-136; (Mar 95; \$352K).
  - \$2.943M Total

Particle		RDT&E BUDGET ITEM JUSTIFICATION SHEET	GET IT	EM JUSTH	ICATION	SHEET (1	M JUSTIFICATION SHEET (R-2 Exhibit)			DATE: March 1996	rch 1996	
nter for Standards  Inter for for for for for for for for for fo	APPR RDT&	P. S.					R-1 ITEM NC C3 Interoperabi	MENCLATU ility 0208045K	I <b>RE</b> /Center for Stan	dards/T20		
sion Description & Budget Ilem Justification. (Continued)  1996 Plans  Develop standards profile to suport procurement of Defense Information Systems Network; (Sep 96; \$146K).  Approve MJLSTD-187-700B, which provides for selected standards to evolve the future Defense Information System; (Sep 96; \$20K).  Approve MJLSTD-187-700B, which provides for selected standards to evolve the future Defense Information System; (Sep 96; \$210K).  Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence (All 96; \$23K).  Complete development of Trusted Networking Security Standards; (Sep 96; \$100K).  Tailor Personal Communications Standards (PCS) to meet DOD needs; (Sep 96; \$100K).  Complete development of Draft ATM over a Tactical Network Standard; (All 96; \$125K).  Complete development of Draft ATM over a Tactical Network Standard; (Sep 96; \$150K).  Complete development of Standards to support the use of Commercial SATCOM; (Sep 96; \$75).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$150K).  Revise and distribute parts of Joint and Electronic Key Management Systems; (Ongoing, \$85K).  Revise and distribute parts of Lectronic Data Interchange (CED), and DODISS Compertmented Work Station Security Standards Prantework, establish a repository of certified DOD IT standards profiles, provide direct standards paper and develop advanced UHF SATCOM Modulation (AUSM); (Ongoing, \$186K).  Pesign and develop advanced UHF SATCOM Modulation (AUSM); (Ongoing, \$186K).  Exploration into User/System Developer Standards Requirements; (Ongoing, \$186K).  Exploration into User/System Developer Standards Requirements; (Ongoing, \$186K).  Develop Multicasting Lower Layer 3 Routing Standards; (Ongoing, \$112K).  Exploration the distribute parts of Joint Pub 6-05; (Ongoing, \$10K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$10K).  Complete development of ITU X-400 Key Protocol Standards; (Ongoing, \$74K).		COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Sion Description & Budget Item Justification, (Continued)  1996 Plans:  Develop standards profile to suport procurement of Defense Information Systems Network; (Sep 96; \$146K).  Approve MIL-STD-187-700B, which provides for selected standards to evolve the finture Defense Information System; (Sep 96; \$126K).  Approve MIL-STD-187-700B, which provides for selected standards to evolve the finture Defense Information System; (Sep 96; \$130K).  Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence (Jul 96; \$52K).  Complete development of Trusted Networking Security Standards, (Sep 96; \$100K).  Tailor Personal Communications Standards (PCS) to meet DOD needs, (Sep 96; \$100K).  Complete development of Draft ATM over at Takeful Network Standard; (Aug 96; \$155K).  Complete development of Draft ATM over at Takeful Network Standard; (Aug 96; \$155K).  Complete development of Draft ATM over at Takeful Network Standard; (Ongoing, \$150K).  Complete development of Draft ATM over at Takeful Network Standard; (Ongoing, \$150K).  Technical Standards support on Joint and Electronic Key Management Systems; (Ongoing, \$150K).  Validation and approval of Electronic Data Interchange (EDI), and IDODISS Compartmented Work Station Security Standards; (Ongoing, \$150K).  Validation and approval of initial Tectical Messaging Standards and initial Thin Stack Standards profiles, provide direct standards Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards Standards support on Joint and Electronic Key Management System; (Jun 97; \$100K).  Design and develop advanced UHF SATICOM Modulation (AUSM); (Ongoing, \$186K).  Exploration into User/System Developer Standards Requirements; (Ongoing, \$186K).  Exploration into User/System Developer Standards Requirements; (Ongoing, \$186K).  Develop Multicasting Lower Layer 3 Routing Standards; (Ongoing, \$105K).  Complete development of ITU X.400 Key Protocol Standards;	T20 C	<b>,</b>		2.943	2.185	1.582	1.639	1.687		2.001	Contg	Contg
Develop standards profile to suport procurement of Defense Information Systems Network; (Sep 96; \$146K).  Approve MIL-STD-187-700B, which provides for selected standards to evolve the future Defense Information System; (Sep 96; \$52K Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (INI) (Jun 96) and commence (Jul 96; \$52K).  Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (INI) (Jun 96) and commence (Jul 96; \$52K).  Complete development of Trusted Networking Security Standards; (Sep 96; \$100K).  Complete development of Draft ATM over a Tectional Network Standard; (Aug 96; \$125K).  Complete development of Draft ATM over a Tectional Network Standard; (Aug 96; \$125K).  Complete development of Draft ATM over a Tectional Network Standard; (Aug 96; \$125K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$150K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$150K).  Technical Standards support on Joint and Electronic Key Management Systems; (Ongoing, \$85K).  Maintain and expend IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards paintain and develop advanced UHF SATCOM Modulation (AUSM); (Ongoing, \$655K).  Substitution and develop advanced UHF SATCOM Modulation (AUSM); (Ongoing, \$856K).  Exploration into User/System Developer Standards; (Ongoing, \$112K).  Echnical Standards support on Joint and Electronic Key Management Systems; (Ongoing, \$85K).  Echnical Standards support on Joint and Electronic Standards; (Ongoing, \$112K).  Echnical Standards Support on Joint and Electronic Standards; (Ongoing, \$100K).  Echnical Standards Support on Joint and Electronic Standards; (Ongoing, \$10K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$240K).  Complete Lower Layer 4 Multicesting Standards; (Ongoing, \$74K).		sion Description & Budget Item Justification	on: (Contin	(ned)								
Develop standards profile to suport procurement of Defense Information Systems Network; (Sep 96; \$146K).  Approve MIL-STD-187-1700B, which provides for selected standards to evolve the future Defense Information System; (Sep 96; \$52K Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence (Jul 96; \$52K).  Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence (Jul 96; \$52K).  Complete development of Trusted Networking Security Standards, (Sep 96; \$100K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96; \$125K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96; \$125K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96; \$150K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96; \$150K).  Revise and distribute parts of Joint Bub 6-05; (Ongoing, \$150K).  Technical Standards support on Joint and Electronic Key Management Systems; (Ongoing, \$150K).  Validation and approval of Electronic Data Interchange (EDI), and DODISS Comparimented Work Station Security Standards to apport on Joint and Electronic Edy Management Systems; (Ongoing, \$665K).  Validation and approval of Initial Tactical Messaging Standards and initial Thin Stack Standards; (Ongoing, \$150K).  Design and develop advanced UHF SATCOM Modulation (AUSM), (Ongoing, \$186K).  Design and develop advanced UHF SATCOM Modulation (AUSM), (Ongoing, \$186K).  Exploration into User/System Developer Standards Requirements; (Ongoing, \$186K).  Enhance Lower Layer 4 Multicasting Sandards; (Ongoing, \$105K).  Enhance Lower Lay	ODEY											
Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence (Jul 96, \$521K).  Complete and approve Standard for Asynchronous Transfer Mode (ATM) on Network Node Interface (NNI) (Jun 96) and commence (Jul 96, \$521K).  Complete development of Trusted Networking Security Standards; (Sep 96, \$100K).  Tailor Personal Communications Standards (PCS) to meet DOD needs; (Sep 96, \$100K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96, \$125K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96, \$125K).  Complete development of Draft ATM over a Tactical Network Standard; (Aug 96, \$125K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$150K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$150K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$150K).  Validation and approval of Electronic Data Interchange (EDI), and DODISS Compartmented Work Station Security Standards (Ongoing, \$150K).  Validation and approval of initial Tactical Messaging Standards and initial Thin Stack Standards; (Ongoing, \$150K).  Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profiles and develop advanced UHF SATCOM Modulation (AUSM); (Ongoing, \$665K).  \$2.185M Total  Commence update of MIL-SID-187-700C for the Defense Information System; (Jun 97, \$100K).  Technical Standards support on Joint and Electronic Key Management Systems; (Ongoing, \$88K).  Exploration into User/System Developer Standards; (Ongoing, \$110K).  Exploration into User/System Developer Standards; (Ongoing, \$110K).  Exploration into User/System Developer Standards; (Ongoing, \$100K).  Revise and distribute parts of Joint Pub 6-05; (Ongoing, \$74K).  Complete development of ITU X.400 Key Protocol Standards; (Ongoing, \$74K).	0 0	Develop standards profile to suport proc Approve MII -STD-187-700B, which n	curement of	f Defense Informa	tion Systems No	etwork; (Sep 9	6; \$146K). Information Syste	.m. (Sen 96: \$\$	2K)			
D EX 19	0	Complete and approve Standard for Asy (Jul 96: \$52K).	ynchronous	Transfer Mode (	ATM) on Netwo	ork Node Interl	face (NNI) (Jun 9	6) and commen	nce update of sta	indard on ATN	A User Network	Interface;
D) FY 19	0	Complete development of Trusted Netw	working Sec	urity Standards; (	Sep 96; \$100K)							
D) FY 19	0 0	Tailor Personal Communications Stand	lards (PCS)	to meet DOD ne	2ds; (Sep 96; \$1:	00K).						
U) FY 19	00	Complete development of Data Commu	unications S	Standards incorpo	rating INTERNI	3T Protocols; (	Sep 96; \$100K).					
D) EY 19	0 0	Complete development of Standards to	support the	use of Commerc	ial SATCOM; (	Sep 96; \$75).						
U) FY 19	0 0	Technical Standards support on Joint ar	nd Electron	ic Key Managem	ent Systems; (Or	1going; \$85K).						
D EY 19	0	Validation and approval of Electronic D	Data Interch	ange (EDI), and I	<b>XXIIISS Compa</b>	rtmented Worl	k Station Security	Standards; (On	180ing; \$100K).			
U) EX 19	00	Validation and approval of initial Tactic Maintain and expand IT Standards Fran	cal Messagii nework, est	ng Standards and ablish a repositor	initial Thin Stac  y of certified DO	k Standards; (( )D IT standard	Ongoing; \$150K) s profiles, provide	). direct standard	ls profile selection		DOD system; (Ongoing;	Ongoing;
FY 19	0	Design and develop advanced UHF SA' \$2.185M Total	TCOM Mo	dulation (AUSM	); (Ongoing; \$66	55K).						
		1997										
			00C for the	Defense Informs	tion System; (Ju	m 97; \$100K).						
Develop Multicasting Lower Layer 3 Routing Standards; (Ongoing Enhance Lower Layer 4 Multicasting Standards; (Ongoing; \$105K Revise and distribute parts of Joint Pub 6-05; (Ongoing; \$240K). Complete development of ITU X.400 Key Protocol Standards; (O	00	Exploration into User/System Develope	nd Electron er Standards	ile Key managem i Requirements; (	ent systems, ten Ongoing; \$186k	ngoing; asor.) [).	٠.					
Revise and distribute parts of Joint Pub 6-05; (Ongoing; \$240K Complete development of ITU X.400 Key Protocol Standards;	0 0	Develop Multicasting Lower Layer 3 R.	Couting Stan	idards; (Ongoing;	\$112K).							
Complete development of ITU X.400 Key Protocol Standards;	00	Revise and distribute parts of Joint Pub	6-05; (Ong	going; \$240K).								
	0	Complete development of ITU X.400 k	Key Protocc	ol Standards; (On	going; \$74K).							

RDT&E BUDGET ITEM JUSTIFICATION SHEET	E BUDGET ITEM	EM JUSTI	TICATION	SHEET (	N SHEET (R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NC C3 Interoperabi	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20	RE Center for Stan	idards/T20		
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T20 Center for Standards		2.943	2.185	1.582	1.639	1.687	1.851	2.001	Contg	Contg
A. Mission Description & Budget Item Justification: (Continued)	tion; (Contir	(poni								
(U) FY 1997 Plans:  o Validation and approval of Tactical Messaging Standards and initial Thin Stack Standards; (Ongoing; \$110K).  o Validation and approval of Tactical Directory Standard; (Ongoing; \$90K).  o Maintain and expand IT Standards Framework, establish a repository of certified DOD IT standards profiles, provide direct standards profile selection support for DOD system; (Ongoing; \$480K). \$1.582M Total	essaging Sta irectory Stan amework, es	ndards and initial dard; (Ongoing; ! lablish a repositor	Thin Stack Star 390K). y of certified DX	ıdards; (Ongoir JD IT standard	ng; \$110K). s profiles, provide	direct standard	s profile selecti	on support for L	OD system; (C	ngoing;
ב										
D. FIORIBII CIBIIRE SUITIBILA			Į <del>.</del>	FY95	Ī	FY96		FY97		
Previous President's Budget (FY 1996)			* C7 (	2.943	] 🚅 🕽	1.759	<b>.</b>	1.654		
Appropriated Value Adiustments to Appropriated Value			7	.y45 0	1. 4.	426				
Adjustments to Budget Year Since FY 1996 President's Budget	President's l	3udget					<b>)</b>	072		
Current Budget Submit/President's Budget Change Summary Explanation:			7	2.943	.2	2.185	<b>.</b>	1.582		
Funding: FY96 increase is due to below threshold reprogramming. FY97 reduction is due to revised inflation rates.	reshold repr I inflation rat	ogramming. es.								
Schedule: N/A Technical: N/A				,						
C. Other Program Funding Summary										
O&M			到二	FY95 10.389	FY96 10.988	EY97 10.031	ΗÓ	Total Cost Contg		
				Page 4 of 18						

RDT&E BUDGET	ITEM JUSTI	FICATION SHEET		(R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM C3 Interoper	R-1 ITEM NOMENCLA C3 Interoperability 02080	ATURE 45K/Center fo	ATURE 45K/Center for Standards/T20	20	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T20 Center for Standards	2.943	2.185	1.582	1.639	1.687	1.851	2.001	Contg	Contg
D. Schedule Profile									
(U) FY 1995 o 1st Quarter - MIL-STD-188-164/165 (SHF) o 1st Quarter - ATM Standard o 2nd Quarter - MIL-STD-188-331A (Draft VTC Multipoint)	Multipoint)								
(U) FY 1996  o 3rd Quarter - EC/EDI Standard  o 4th Quarter - MIL-STD-188-220 (Revised Combat Net Radio Standard)  o 4th Quarter - DISN Profile	nbat Net Radio Standard)								
(U) FY 1997  o 1st Quarter - UHF SATCOM 5KHZ DAMA Waveform Standard (Voice)  o 2nd Quarter - ATM Standard (UNI-B)  o 4th Quarter - Multicast	aveform Standard (Voice)						•		
		-							
		2	Page 5 of 18						

	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	&E PROG	RAM EL	EMENT/P	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	OST BRE	AKDOW	V (R-3)		<b>DATE:</b> March 1996	
APPROPRIA RDT&E, Defe	RIATION/BUDGET ACTIVITY Defense Wide/07	GET ACTN	VITY				R-1 ITEN C3 Interop	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Center for Standards/T20	TURE 45K/Center for St	andards/T20	
A. Project Cost	Project Cost Breakdown						96	YONE			
Systems En	s Engineering					2,943	43	2,185		1,582	and the second second
B. Budget Acq	Acquisition History and Planning Information	and Planning	Information								
Contractor or Government Performing Activity Program	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to FY95	Budget FY95	Budget FY96	Budget EY97	Budget To Complete	Total	
LOGICON	C/CPFF	08/91	12,490	12,490	2,209	2,131	1,520	1,250	Confg	Contg	
All Other Contracts	acts				812	812	999	332	Contg	Contg	
		Subtotal Contracts	icts		3,021	2,943	2,185	1,582			
In House Engined	In House Engineering & Technical Support: N/A	Support: N/A									
TOTAL PROJECT	TC				3,021	2,943	2,185	1,582			1000 × 100
				÷							
						Page 6 of 18	8				

R-1 Shopping List UNCLASSIFIED

RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	rch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 FFEM P C3 Interoper	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Tec	TURE 5K/Technolog	gy Assessmen	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Technology Assessment and Insertion	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T80 Technology Assessment and Insertion	*0	.571	.563	.584	.601	.658	.712	Contg	Contg
			• •	8					

A. Mission Description & Budget Item Justification: \* This project is not a new start but has evolved from an existing effort within Project T30, Test and Evaluation. This project continues to plan and promote an expeditious and cost effective development of needed information technology capabilities by targeting R&D efforts to DOD mission needs and leveraging on DOD and industry core information services. developments. It provides for the transition of new technologies into leading edge and

(U) FY 1995 Plans: Effort previously in Project T30.

### (U) FY 1996 Plans:

- 0
- Engineering for Network Engineering Assessment Facility (NEAF); (Ongoing; \$185K);
  Engineering for ATM systems for Non-Secure Internet Protocol Router Network (NIPRNET) and Clobal Combat Support Systems (GCSS); (Ongoing; \$386K); \$.571M Total

### (U) FY 1997 Plans:

- \$200K); Engineering for Network Engineering Assessment Facility (NEAF); (Ongoing;
- Engineering for ATM systems for NIPRNET and GCSS; (Ongoing; \$363K); 0 0

\$.563M Total

RDT&E BUDGET ITEM JUST	ET ITEM	JUSTIE	USTIFICATION SHEET (	TION SHEET (I	(R-2 Exhibit)			DATE: Marc	: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCLATU C3 Interoperability 0208045K		TURE  SK/Technology Assessment and Insertion/T80	sessment and In	nsertion/T80	
COST (in millions)	F.	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T80 Technology Assessment and Insertion	0	*0	.571	.563	.584	.601	.658	.712	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996)			FY95 0	EY96 .954		EY97 .897				
Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget	sident's Budget		000	.954 383 .571		334				
Change Summary Explanation: FY96 decrease FY97 adjustme	FY96 decrease is due to congressional adjustment t FY97 adjustments are due to revised inflation rates.	ssional adj vised inflat	ustment to Defaion rates.	inse Wide Appr	FY96 decrease is due to congressional adjustment to Defense Wide Appropriations & below threshold rep		programmings.			
Schedule: N/A Technical: N/A										
C. Other Program Funding Summary: N/A										
D. Schedule Profile										
(U) FY 1995: Incorporated into Project T30.  (U) FY 1996  o 1st Quarter - 4th Quarter- o Engineering for Network Engineering Assessment Facility (NEAF) o Engineering for ATM systems for NIPRNET and GCSS	ment Facility (N) and GCSS	EAF)								
(U) <u>FY 1997</u> o 1st Quarter - 4th Quarter- o Engineering for Network Engineering Assessment Facility (NEAF) o Engineering for ATM systems for NIPRNET and GCSS	ment Facility (NI and GCSS	EAF)							•	
				Page 8 of 18		;				

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	T/PROJECT	COST BR	EAKDOW	OJECT COST BREAKDOWN (R-3)		DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07			R-1 ITE C3 Inter	R-1 ITEM NOMENCLAT C3 Interoperability 0208045	TURE 5K/Technolog	TURE    SK/Technology Assessment and Insertion/T80	
A. Project Cost Breakdown	FV04		FVOK		FV07		
Systems Engineering	0		571		563		-0.10,000
B. Budget Acquisition History and Planning Information							
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Activity Vehicle Date EAC EAC	Prior to EY95	Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total Program	
All Other Contracts	0	0	571	563	Contg	Contg	
Subtotal Contracts	0	0	571	563			
In House Engineering & Technical Support: N/A							
TOTAL PROJECT	0	0	571	563			
		Page 9 of 18	18				

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RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	SHEET (1	R-2 Exhibit)			DATE: March 1996	oh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N C3 Interopera	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Tes	TURE 5K/Test and I	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T30 Test and Evaluation	20.679	13.080	14.449	15.081	15.665	16.516	17.466	Contg	Contg

E is performed throughout the entire life cycle including proof-of-concept, system development, system deployment, and evaluation (T&E), this project ensures that C3I and information systems (IS) developed by DOD Components ice, operational test and evaluation, systems effectiveness and force effectiveness testing of all C3I and IS system Mission Description & Budget Item Justification; Through effective life cycle test are interoperable and permit flexible employment of forces throughout the world. T& and system upgrade and modification. This T&E includes interoperability, performan standards and system interfaces used in joint and combined operations.

### (U) FY 1995 Plans:

- Develop Independent Evaluation Reports (IER) for Phase I DISN testing; perform independent evaluation of DMS X.400 project; and conduct operational evaluation of DISN Integrated Network Management System (INMS), GCCS, and other DISA oversight programs; (Sep 95; \$1835K). 0
  - Continue to support CINC exercises; (Sep 95; \$920K) 0
- DISN, ITSDN, JTIDS, Global Grid, Asynchronous Transfer Mode (ATM), JWIDs, and multiple US command and Continue to perform interoperability and technical testing and demonstrations of the following system interfaces and standards; DSN, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite control systems employing TADILS A/B/C/J, ATDL-1, USMTF and Variable Message Format standards; (Sep 95; \$6249K). Terminal System, Joint Advanced Special Operations Radio System (JASORS),
  - In conjunction with DISA's new mission to support testing and associated training activities of the Navy Computer and Telecommunications Command, support the following programs: Beta and OT&E of Navy unique and DMS joint projects, Naval Communications Processing and Routing System (NAVCOMPARS), Naval Communications Processing and Routing Follow-on System (NAVCOMPARS II), Navy Message Switching System (NMSS), Multilevel Mail Server (MSS), Message Distribution Terminal (MDT); (Ongoing, \$5645K)
    - \$1141K Continue to document C3 equipment strings; perform major switch tests (Sep 95, 0
- Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 95, \$309K). 0
  - Develop next version of the Leading Edge Services Plan to include technology areas such as distributed computing, generic workstations, high speed interfaces and update existing technology areas; (Ongoing, \$450K) 0
    - Harmonize and integrate Global Grid and Joint Director's Laboratory efforts with new version of Leading Edge Services Plan; (Ongoing, \$300K). 0
- Provide the planning for advanced technology demonstrations and play the principal role in evaluating their capabilities for providing leading edge services to DOD customers; (Ongoing, 0
- Lead technical support to DOD wide technology insertion working groups; (Ongoing, \$75K) 0
  - Lead technical support to DISA technology working groups; (Ongoing, \$75K).
  - Continue to provide other CINC support; (Ongoing, \$3,580K). 0 0

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ITEM JUSTI	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N C3 Interopera	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	TURE SK/Test and E	valuation/T3		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T30 Test and Evaluation	20.679	13.080	14.449	15.081	15.665	16.516	17.466	Contg	Contg

# A. Mission Description & Budget Item Justification: (Continued)

### (U) FY 1996 Plans:

- Provide independent operational evaluation and assessments of Defense Information Infrastructure (DII) programs, i.e., Defense Message System (DMS), Defense Information Systems Network (DISN), Global Command and Control System (GCCS) and Survivable Secure Communications Network (SSCN). (Sep 96, \$1446K)
  - Provide CINC interoperability testing and technical assistance; publish Lessons Learned Report sharing C4I problems, issues and solutions; (Ongoing, \$649K). 0
- DAMA), Military Strategic and Tactical Relay (MILSTAR) Satellite Program, Ultrahigh Frequency Satellite Terminal System, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US Perform interoperability and technical testing for the following C4IFTW system interfaces and standards; Defense Information Systems Network, Defense Message System, AN/USC-42 (Miniand VMF standards (Ongoing, \$4839K) command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF
  - g, establishment and employment of tactical multi-Service systems and the integration of these systems Provide technical and operational fixes to interface and interoperability problems in a coordinated environment involving both the user and the developer/commercial vendor, provide the into the Strategic Network and Defense Information Infrastructure. Document critical C3 equipment strings (Sep 96, \$800K). Commander in Chief Joint Task Force planner operational guidance in the plannin
- System joint projects, Multilevel Mail Server (MMS), Message Distribution Terminal (MDT), Emergency Shore and Fleet Support. Types of testing include hardware acceptance testing (HAT), (), software change proposal testing (SCP), security test and evaluation (ST&E) and DMS functional testing; Telecommunications Command support the following automated information systems and programs: BETA and interoperability Test and Evaluation of Navy unique and Defense Message In conjunction with the Defense Information Systems Agency's mission to provide testing and associated training and implementation support for the Navy Computer and quality acceptance testing (QA), interface/interoperability certification testing (ICI (Ongoing, \$4503K).
  - Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 96, \$843). \$13.080M Total

RDT&E BUDGET ITEM JUST		FICATION	SHEET (	FICATION SHEET (R-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N C3 Interoper	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	TURE 5K/Test and E	evaluation/T30		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T30 Test and Evaluation	20.679	13.080	14.449	15.081	15.665	16.516	17.466	Contg	Contg
				die.					

# A. Mission Description & Budget Item Justification: (Continued)

### (U) FY 1997 Plans

- Evaluate systems operational effectiveness and suitability for fielding for the following Defense Information Systems Agency oversight programs: Defense Message System, Global Command and Control System, and Defense Information Systems Network; (Sep 97, \$1570K).
  - Provide interoperability testing and technical assistance; publish Lessons Learned Report sharing C4I problems, issues and solutions; (Ongoing, \$584K).
- Military Strategic and Tactical Relay (MILSTAR) Satellite Program, Ultrahigh Frequency Satellite Terminal System, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command Perform interoperability and technical testing for the following C4IFTW system interfaces and standards., Defense Information Systems Network (DISN), AN-USC-42 (Mini- DAMA) and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VMF standards; (Ongoing, \$5651K).
- Provide technical and operational fixes to interface and interoperability problems in a coordinated environment involving both the user and the developer/commercial vendor, provide the Commander in Chief Joint Task Force planner operational guidance in the planning, establishment and employment of tactical multi-Service systems and the integration of these systems into the Strategic Network and Defense Information Infrastructure. Document critical C3 equipment strings; (Sep 97, \$778K)
  - Multilevel Mail Server (MMS), Message Distribution Terminal (MDT), Emergency Shore and Fleet Support. Types of testing include hardware acceptance testing (HAT), quality acceptance testing In conjunction with the Defense Information Systems Agency's mission to provide testing and associated training and implementation support for the Navy Computer and Telecommunications Command, support the following automated information systems and programs: BETA and interoperability Test and Evaluation of Navy unique and Defense Message System joint projects, (QA), interface/interoperability certification testing (ICT), software change proposal testing (SCP), security test and evaluation (ST&E) and DMS functional testing; (Ongoing, \$4943K)
    - Test/evaluate/certify information transfer systems related to GCCS; ensure that GCCS provides quality command and control capability to the warfighter CINCs via timely and cost effective migration; (Sep 97, \$773K).
      - o Asseses CINCs intelligence systems interoperability initiatives; (Sep 97, \$150K). \$14.449M Total

RDT&I	RDT&E BUDGET ITEM JUST	TEM JUSTI	FICATION	SHEET (1	FICATION SHEET (R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	CTIVITY				R-1 ITEM N C3 Interopera	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Tes	TURE 5K/Test and E	TURE 5K/Test and Evaluation/T30	0	
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T30 Test and Evaluation		20.679	13.080	14.449	15.081	15.665	16.516	17.466	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996)	(96)	EY95 20.514	<u>75</u>	EY96 14.677		EY97 14.413				
Appropriated Value Adjustments to Appropriated Value		20.5	i14 65	14.677	_					
Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation:	'Y 1996 President's Budget	Budget 20.679	62	13.080	•	.036				
FY95 adjustment is FY96 adjustment if FY97 adjustment is FY97 adjustment is	FY95 adjustment is the result of below threshold reprogramming. FY96 adjustments to Defense Wide Apple FY96 adjustment is due to congressional adjustments to Defense Wide Apple FY97 adjustment is due to revised fiscal guidance and realignment of funds.	v threshold reprogranal adjustments to all guidance and re	amming. Defense Wide ≠ alignment of fur	Appropriations au ids.	amming. Defense Wide Appropriations and below threshold reprogramming. alignment of funds.	ıld reprogrammi	ng			
Schedule: N/A Technical: N/A										

C. Other Program Funding Summary: N/A

RDT&E BUD	RDT&E BUDGET ITEM JUSTI	TIFICATION SHEET (R-2 Exhibit)	SHEET (R	-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y			R-1 ITEM C3 Interoper	R-1 ITEM NOMENCLA C3 Interoperability 020804	ATURE 45K/Test and	TURE SK/Test and Evaluation/T30	0.	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T30 Test and Evaluation	20.679	9 13.080	14.449	15.081	15.665	16.516	17.466	Contg	Contg

Schedule Profile: U.

### (U) FY 1995

- 2nd Quarter IER for Phase I DISN testing; DMS X.400 project; OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server (MMS), Message Distribution Terminal (MDT). 0
- AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite Terminal System, JASORS, DISN, ITSDN, JTIDS, control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards. C4IFTW STDN/JWID Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and 4th Quarter - Interoperability and technical testing for the following: GCCS, DSN, demonstrations and assessments. 0

- activities of the Navy Computer and Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server (MMS), 2nd Quarter - IER for Phase I DISN testing; DMS X.400 project; OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training Message Distribution Terminal (MDT) 0
- 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards.

### (U) FY 1997

0

- 2nd Quarter DMS X.400 project, OT&E of DISN INMS, GCCS and others. In conjunction with DISA's mission to support testing and associated training activities of the Navy Computer and 0
  - Telecommunications Command, support the following programs: BETA and OT&E of Navy unique and DMS joint projects, Multilevel Mail Server, (MMS), Message Distribution Terminal (MDT). 4th Quarter Interoperability and technical testing for the following: GCCS, AN/USC-42 (Mini-DAMA), Ultrahigh Frequency Satellite Terminal System, DISN, Global Grid, Asynchronous Transfer Mode (ATM), and multiple US command and control systems employing TADILS A/B/C/J, ATDL-1, USMTF and VHF standards. 0

	RDT&E	••	PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	EMENT/P	ROJECT	CT COST BRE	EAKDOW	'N (R-3)	A	DATE: March 1996	
APPROPRI RDT&E, De	PRIATION/BUDGET ACTIVITY Defense Wide/07	GET ACTI	VITY				R-1 ITE C3 Intero	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Test and Evaluation/T30	TURE 45K/Test and Eva	duation/T30	
A. Project Cos	Project Cost Breakdown					FY95		EY96	EY97		
C3I Interop	teroperability and Information Systems Testing	formation Syst	tems Testing			20,679		13,080	14,449	6	
B. Budget Aco	Acquisition History and Planning Information	y and Planning	Information								
Test and Eva	Evaluation Organizations	tions									
Contractor or Government Performing Activity Program	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Prior to EY95	Budget FY95	Budget EY96	Budget FY97	Budget To Complete	Total Program	
* LOGICON	C-CPAF	16/80	12,252	12,252	9,134	2,722	1,396	2,203	Contg	Contg	
* INTEROP	C-CPAF	16/80	12,870	12,870	9,610	2,846	1,594	2,203	Contg	Contg	
* BDM	C-CPAF	16/80	11,880	11,880	8,855	2,670	1,854	2,203	Contg	Contg	
* VALIDITY	C-T&M	16/01	3,769	3,769	0	3,158	1,611	0	Confg	Contg	
All Other Contracts	acts				0	1,371	0	0	Contg	Contg	
		Subtotal Contracts	acts		27,599	12,767	6,455	6,609	Contg	Contg	
In House Engine	In House Engineering & Technical Support	al Support									-
		Subtotal In-House	use			7,912	6,625	7,840			
TOTAL PROJECT	CT					20,679	13,080	14,449			1
* Current OM	NIBUS contract	ts will expire in	* Current OMNIBUS contracts will expire in FY 96 and new contracts will	/ contracts will	be awarded in FY 97.	FY 97.					
						Page 15 of 18	18				

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUST	T ITEM JUSTI	FICATION	SHEET (	IFICATION SHEET (R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N C3 Interoper	R-1 ITEM NOMENCLA C3 Interoperability 020804	TURE 5K/Major Ra	nge and Test F	TURE  SK/Major Range and Test Facility Base (MRTFB)	(RTFB)
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T40 Major Range and Test Facility Base (MRTFB)	8.829	7.356	7.674	8.009	8.344	8.860	9.368	Contg	Contg

to operate DISA's Joint Interoperability Test Command (JITC) which is a member of DOD's Major Range and Test Facility Base (MRTFB). Indirect operation/maintenance expenses, overall testbed improvement and modernization, and facility and logistics support are included in this project. Mission Description & Budget Item Justification: This project provides resources

## (U) FY 1995 Accomplishments:

0

- accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database and other microcomputer applications to provide cost manpower and fiscal resources; provide base operations business support to JITC's testing mission; (Ongoing; \$2206K).
  - Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and the newly incorporated Cheltenham, MD for DOD use; (Ongoing; \$6623K) \$8.829M Total 0

### U) FY 1996 Plans:

0

- accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database and other microcomputer applications to provide cost
  - manpower and fiscal resources; provide base operations business support to JTC's testing mission; (Ongoing; \$1576K). Maintain and operate the JTC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing; \$5780K). \$7.356M Total 0

### (U) FY 1997 Plans;

- accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; continue to develop automated support for management of contracts, Develop automated systems to facilitate test and evaluation and maximize use of test assets; develop and enhance Corporate Database and other microcomputer applications to provide cost manpower and fiscal resources; provide base operations business support to JTC's testing mission; (Ongoing, \$1921K). 0
  - Maintain and operate the JITC test facilities at Fort Huachuca, AZ; VA and Cheltenham, MD for DOD use; (Ongoing; \$5753K) \$7.674M Total 0

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ITEM JUSTII	FICATION	SHEET	8-2 Exhibit)			DATE: Mar	March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENCL. C3 Interoperability 02080	R-1 ITEM NOMENCLATURE C3 Interoperability 0208045K/Major Range and Test Facility Base (MRTFB)	ATURE 45K/Major Rar	ige and Test F	acility Base (	ARTFB)
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
T40 Major Range and Test Facility Base (MRTFB)	8.829	7.356	7.674	8.009	8.344	8.860	9.368	Contg	Contg
<ul> <li>B. Program Change Summary</li> <li>Previous President's Budget (FY 1996)</li> <li>Appropriated Value</li> <li>Adjustments to Appropriated Value</li> <li>Adjustments to Budget Year Since FY 1996 President's Budget</li> <li>Current Budget Submit/President's Budget</li> <li>Change Summary Explanation:         <ul> <li>FY96 adjustment is due to</li> <li>FY97 adjustment is due to</li> </ul> </li> <li>C. Other Program Funding Summary: N/A</li> <li>D. Schedule Profile Milestones</li> </ul>	8.8 8.8 8.8 8.8 revised	25 29 29 ssional adjustment inflation rates.	FY96 7.948 7.948592 7.356 s to Defense Wi	de Appropriation	EY97 7.805 7.674 7.674	hreshold reprogramming.	mming.		
(U) FY 1995  1st-4th QuarterMulti level security accreditation and certification of C3I systems; Upgrade wireless systems testbed; Enhanced Traffic Loading Device; Establish Test Support Subsystem; FY 95 network T&E requirements; BOS and RPMAR and Corporate MIS Database; Improvement and modernization.	tification of C3I syst	ems; Upgrade w Improvement a	rireless systems and modernization	testbed; Enhance	d Traffic Loadii	ng Device; Esta	ıblish Test Sup	oort Subsystem;	FY 95

(U) FY 1996 1st-4th Quarter- BOS and RPMAR and Corporate MIS Database; business process review and improvement; test infrastructure

(U) FY 1997 1st-4th Quarter- BOS and RPMAR and Corporate MIS Database; business process review and improvement; test infrastructure

		RDT&EP	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	LEMENT/P	ROJECT CO	ST BREAK	DOWN (R-3)			DATE: March 1996
APPROPRI RDT&E, Def	RIATION/BUD Defense Wide/07	PRIATION/BUDGET ACTIVITY Defense Wide/07	VITY				R-1 ITEN C3 Interop	R-1 ITEM NOMENCLATU C3 Interoperability/0208045K	TURE 45K/Major Range an	R-1 ITEM NOMENCLATURE C3 Interoperability/0208045K/Major Range and Test Facility Base (MRTFB)
A. Project Cos	Project Cost Breakdown									
<ul><li>a. Improveme</li><li>b. Base Opera</li><li>c. Other Institut</li></ul>	Improvement and Modernization (I&M) Base Operating Support (BOS) Other Institutional Expenses	zation (I&M) (OS)				840 1,604 6,385		651 891 5,814	612 612 927 6,135	
TOTAL:						8,829		7,356	7,674	
B. Budget Acc	quisition Histor	Budget Acquisition History and Planning Information	Information							
Contractor or Government Performing Activity Program	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to EY95	Budget FY95	Budget EY96	Budget FY97	Budget To Complete	Total
* Logicon	C-CPAF	16/80	5,247	5,247	7,882	663	0	748	Contg	Contg
* INTEROP	C-CPAF	16/80	4,468	4,468	6,693	564	2,186	748	Contg	Contg
* BDM	C-CPAF	08/91	5,361	5,361	7,527	819	0	749	Contg	Contg
* VALIDITY	C-T&M	16/01	1,747	1,747	0	1,106	0	0	Contg	Contg
Subtotal C In House Engineering & Technical Support	ering & Technic	Subtotal Contracts	icts		22,102	2,951	2,186	2,245	Contg	Contg
		Subtotal In-House	186			5,878	5,170	5,429		
TOTAL PROJECT	CT					8,829	7,356	7,674		
TOTAL MAN	TOTAL MANAGEMENT AND SUPPORT  * Current OMNIBUS contracts expire in FY	ND SUPPORT ts expire in FY	IANAGEMENT AND SUPPORT  OMNIBUS contracts expire in FY 96 and new contracts will be awarded in FY 97.	itracts will be av	warded in FY 97	7.			>	
						Page 18 of 18	20			

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ITEM JUSTIF	CATION	SHEET (R	-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	URE System (NMCS)	-Wide Support	/0302016K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Total Program Element (PE) Cost	3.536	1.995	2.047	2.158	2.234	2.356	2.481	Contg	Contg
NMCS Subsystem Engineering/T50	1.553	.400	.379	.428	.465	.552	.643	Contg	Contg
Contingency Planning for the President (CPP)/T51	.270	<b>*</b> 0	0	0	0	0	0	Contg	Contg
NMCS Command Center Engineering/S32	1.314	1.221	1.268	1.315	1.337	1.359	1.378	Contg	Contg
Support to Defense Support Activity (DSA)/Z60	.399	.374	.400	.415	.432	.445	.460	Contg	Contg

A. Mission Description and Budget Item Justification:

integration, and technical assessments for NMCS Command and Control (C2) systems. This support provides informed decision-making linkage between the National Command Authorities (NCA) and the Commands. Concentrating on the CINCs, this engineering draws upon improved C2 methodologies and technology insertion opportunities to meet the command, control and information system requirements of the CINCs for all crises and security threats involving US military forces. These efforts emphasize interoperability This program provides concept development, requirements definition, proof-of-principle experiments, rapid prototyping and technology insertions, technical specifications, systems engineering and and are designed to contribute directly to the achievement of the global C4I infrastructure. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

\*In FY96, this project transfers to PE0303131K.

RDT&E BUDGET ITEM JUSTI	I ITEM JUST	IFICATION	SHEET (	FICATION SHEET (R-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM P National Milits	R-1 ITEM NOMENCLATURE National Military Command System (h	TURE (ystem (NMCS)	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	)302016K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Subsystem Engineering/T50	1.553	.400	.379	.428	.465	.552	.643	Contg	Contg

participation in Secure Tactical Data Network (STDN) demonstrations provides a rapid assessment of technology advances and generates interoperability issues and associated solutions. The objective of the Multi-Level Security (MLS) program is to expedite the fielding of MLS technology and capabilities in DOD through MLS technology insertion in support of the Global Command and Control evelopment and integration time, as well as costs for command and control systems, must be sought. The active engineering support to C4I systems by developing customized, interoperable information systems from systems Shelf Software (COTS/GOTS) products; and evaluates the utility of advance command center system support capabilities for interfacing with CINC C2 Information Systems. To accommodate rapid technical architectures; identifies, prototypes and evaluates subsystem components in C2 environment; provides technology assessments of Commercial Off-the-Shelf Software/Government Off-thethe O&M appropriation under PE 0303150K. Mission Description & Budget Item Justification. This project provides subsystem changes in requirements and increasing budget pressures, new approaches to reduce d System (GCCS). Beginning FY 1996, the MLS portion of this project will migrate to

## FY 1995 Accomplishments:

0 0

- Document findings of JWID-94 (Nov 94; \$75K).
- Plan and participate in JWID-95, incorporating new technologies such as image manipulation, new mapping technology, communications management and data compression, and costeffective distributed computing (Sep 95; \$101K)
  - Perform field evaluations for the "flyaway" workstations delivered to the Marines in the Pacific (Feb 95; \$92K). 0
- ; information from competing vendors and by prototyping new capabilities (Sep 95; \$149K). Continue to evaluate the performance of flyaway workstations by collecting 0
  - Continue to implement and assess a deployable JTF "modular C4I package" and transition to a common JTF solution for CINCs (Sep 95;\$200K) 0
    - Analyze and evaluate candidate software products for the evolving GCCS baseline (Jun 95;\$500K). 0
- est and evaluation of integrated GCCS C3 hardware and system network and joint application software Provide mission support to Joint Staff and operational CINC level through t (Sep 95; \$436K). 0

\$1.553M Total

Page 2 of 17

RDT&E BUD(	GET ITEM JUSTIFI	C)	ATION SHEET	(R-2 Exhibit)	jt)		<b>DATE:</b> March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM National Mili	R-1 ITEM NOMENCLAT National Military Command Sy	ATURE System (NIMCS	FURE stem (NMCS)-Wide Support/0302016K	/0302016K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Subsystem Engineering/T50	1.553	.400	.379	.428	.465	.552	.643	Contg	Contg
FY 1996 Plans:  o Continue to participate in JWID and similar exercises to assess interoperability among the Services and to introduce new technology continue to improve the capabilities of portable flyaway packages through prototyping and evaluations (Sep 96; \$271K).  \$.400M Total	llar exercises to assess intortable flyaway packages	teroperability an s through protot	nong the Service	s and to introduc tions (Sep 96; \$2	e new technolog 271K).	y (Sep 96; \$129K).	9K).		
by Make enhancements to the JTF Deployable System (Sep 97; \$245K).  Conduct workstation technology assessments (Sep 97; \$50K).  Make COTS/GOTS integration enhancements (Sep 97; \$84K).	ble System (Sep 97; \$24. nents (Sep 97; \$50K). ments (Sep 97; \$84K).	5K).							
Acquisition strategy: Electrospace Systems Inc., Arlington, VA; Booz-Allen & Hamilton Inc., Arlington,	lington, VA; Booz-Allen	& Hamilton Inc	c., Arlington, VA						
	;								
			Page 3 of 17	4					

RDT&E BUDGET ITEM JUSTIFICA	FEM JUSTI	FICATION	TIFICATION SHEET (R-2 Exhibit)	8-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N National Mili	R-1 ITEM NOMENCLATURE National Military Command Syste	<b>FURE</b> I System (NM	CS)-Wide Su	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	KK KK
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Subsystem Engineering/T50	1.553	.400	.379	.428	.465	.552	.643	Contg	Contg
B. Program Change Summary:  FY95  Previous President's Budget (FY1996)  Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget  Change Summary Explanation: N/A  FY96 reduction due to Congressional adjustment to Defense-wide investment appropriation.  FY97 reduction due to revised inflation rates.	t's Budget ment to Defense s.	-wide investir	EY95 1.553 0 1.553 tent appropriati		EY96 .412 .412 .012		EY97 .387 .379		
C. Other Program Funding Summary: Related RDT&E: Program Element #0208045K, C3 Interoperability.	45K, C3 Interor	erability.							

### D. Schedule Profile: FY1995 1st quarter:

Fielding of Final Joint Operational Support Systems (JOSS) Configuration and Integration into PACOM Theater Command Control System (TCCS) Network
Portable Tactical Automated Dependent Surveillance Systems (PTADSS) Integration with JOSS

2nd quarter:

Page 4 of 17

RDT&EB	RDT&E BUDGET ITEM JUSTI		FICATION SHEET		(R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 ITEM National Mi	R-1 ITEM NOMENCLA National Military Commar	ATURE nd System (N	MCS)-Wide Su	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	6K
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Subsystem Engineering /T50		1.553	.400	.379	.428	.465	.552	.643	Contg	Contg
D. Schedule Profile (Continued)										
FY1995 3rd quarter: MARFORPA JWID-95 Der	MARFORPAC PTADSS Command Post Exercise (CPX) Participation JWID-95 Demonstration/Scenario Development	nand Post Exerio Development	cis <b>e</b> (CPX) Parti	cipation						
Award of nev 4th quarter: PTADSS Fiel	Award of new SETA contract PTADSS Fielded at MARFORPAC Establish network engineering infrastructure and network management of IWID network	AC Trastructure and	network manage	sement of JWII	network					
FY 1996 2nd quarter: JTF workstati	JTF workstation Prototype Exercise Participation JWID-96 Demonstration/Scenario Development	cise Participation								
	Federal Agencies Integration of JTF Protoptype Exercise first option year of SETA contract	f JTF Protopty A contract	8.							
4th quarter: JTF Worksta Establish netv	JTF Workstation Prototype Enhancements Establish network engineering infrastructure and network management of JWID network	ihancements nfrastructure and	network manag	gement of JWIL	network					
Enhancement Strd quarter: Enhancement JWID-97 De	Enhancement to JTF Prototype for Federal Agencies JWID-97 Demonstration/Scenario Development	for Federal Agenric Developmen	cies t							
Exercise of se 4th quarter: Technology a Establish net	Exercise of second option year of SETA contract Technology assessment for JTF Operations Establish network engineering infrastructure and network management of JWID network	of SETA contract Operations of rastructure and	t I network manag	gement of JWIL	network					
			Д.	Page 5 of 17	•	·	·			

	RDT	&E PRO	RDT&E PROGRAM ELEMENT/P	EMENT/	PROJECT	COSTB	REAKD	ROJECT COST BREAKDOWN (R-3)		DATE: March 1996	rch 1996
APPROPR RDT&E, De	PRIATION/BUDGET ACTIVITY Defense Wide/07	GET ACTI	VITY				R-1 Nati Sub	FTEM NOM onal Military (system Engine	R-1 ITEM NOMENCLATURE National Military Command System (Subsystem Engineering (T50)	(NMCS) - Wide S	R-1 ITEM NOMENCLATURE National Military Command System (NMCS) - Wide Support 0302016K/NMCS Subsystem Engineering (T50)
A. Project Cost Breakd Project Cost Categories	A. Project Cost Breakdown (\$000) Project Cost Categories	ī (\$000)				FY95		EY96		EY97	
a. Syste	a. Systems Engineering	<b>50</b>				1,553	·	400		379	
Total B. Budget A Support and	Total  B. Budget Acquisition History and Planning Information: Support and Management Organizations	tory and Plan Organizations	ming Informa	tion:		1,553		400		379	
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to EY95		Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total
Multiple Performing Activities	C/SS CPAF CPFF WR/PO				••		1,553	400	379	Contg	Contg
Government ]	Government Furnished Property: N/A	ty: N/A							,		
Total Project							1,553	400	379		
						Page 6 of 17	of 17				

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	GET ITE	M JUSTIF	ICATION	SHEET (R	-2 Exhibit)			DATE: March 1996	зћ 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ĹΥ				R-1 ITEM National Mili	R-1 ITEM NOMENCLA National Military Command S	ATURE System (NMCS	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	'0302016K	
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Contingency Planning for the President (CPP)/T51		.270	*0	0	0	0	0	0	Contg	Contg

A. Mission Description and Budget Item Justification:
All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request.

\* In FY96, this project transfers to Program Element 0303131K.

Change Summary Explanation: FY95 adjustments due to below threshold reprogramming.

C. Other Program Funding Summary:
Related RDT&E: PE 0303131K Minimum Essential Emergency Communications Network (MEECN) in FY 96-01.

D. Schedule Profile:

Information can be provided upon request.

RDT&E PROGRAM ELEMENT/PRO	ROJECT COST BREAKDOWN (R-3)	CAKDOWN (R-	3)	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCLA National Military Comman Support/0302016K/Contin	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/Contingency Planning for the Pr	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/Contingency Planning for the President (CPP)(T51)	)(T51)
A. Project Cost Breakdown (\$000)	FY95	FY96		FY97	
Project Cost Categories  a. Systems Engineering	270	0		0	
Total	270	0		0	
B. Budget Acquisition History and Planning Information: Support and Management Organizations					
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity  Activity  EAC  EAC  EAC	Prior to Budge EY95	Budget Budget FY95	Budget FY97	Budget To Total  Complete Program	
Multiple Performing Activities Government Furnished Property: N/A	270	0		Contg	
Total Project	. 270	0	. 0		
		•			
	Page 8 of 17				

R-1 Shopping List UNCLASSIFIED

RDT&E BUD	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	TFICATIO	N SHEET	(R-2 Exhibi	<u>(</u>		<b>DATE:</b> March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	I.V.			R-1 ITEM National Mili	R-1 ITEM NOMENCLAT National Military Command Sy	ATURE System (NMCS)	FURE stem (NMCS)-Wide Support/0302016K	0302016K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Command Center Engineering/S32	1.314	1.221	1.268	1.315	1.337	1.359	1.378	Contg	Contg

# A. Mission Description and Budget Item Justification:

requirements analysis, systems definition and engineering, and rapid prototyping. The project emphasizes the utilization of commercial off-the-shelf and emerging technologies for application in NMCS command centers in information processing and overall facility design to provide common solutions to theater, national, and world-wide crisis situations affecting the Department of Defense and the This project provides overall system engineering and technical integration activities for a broad spectrum of command center systems which provide the underpinning capabilities for the crisis/war decision-making processes of the National Command Authorities, the National Military Command System, and the Unified and Specified Commanders-in-Chief. Technical activities include Executive Office of the President.

## FY 1995 Accomplishments:

0

- IAOC) new Mod Block development and integration (Sep 95; \$103K). Provide system engineering support for National Airborne Operations Cener (N 0
  - Provide system engineering support for diverse communications and information system requirements of the NAOC aircraft (Ongoing; \$97K).
- Provide systems engineering support for diverse communications and information system requirements of the WWMCCS Airborne Resources (WABNRES) including CINC, TACAMO, Presidential, and other executive aircraft (Ongoing; \$451K).
- Provide system engineering support to implement a replacement Emergency Action Message (EAM) dissemination system for NMCS which is integrated into the Defense Message System (DMS) program and interfaced to MILSTAR (Sep 95; \$194K). 0
  - Develop engineering plans for National Military Command Center (NMCC) and NMCC-Site R to provide a seamless transition into the new NMCC (Sep 95; \$190K). 0
- from the old NMCC to the new NMCC as part of the overall command centers renovation and relocation Provide systems engineering and systems integration to transition the C2 system (Sep 95; \$279K). \$1.314M Total 0

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RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM   National Mili	R-1 ITEM NOMENCLATURE National Military Command Syster	URE System (NMC)	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	'0302016K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Command Center Engineering/S32	1.314	1.221	1.268	1.315	1.337	1.359	1.378	Contg	Contg

### FY 1996 Plans:

0

0

- Technical analysis for implementation of improvements of NEACP and SAM aircraft (Sep 96; \$155K).
- Engineering for implementation of an Airborne Communications Bus on the NEACP to interconnect mission equipment (Jun 96;\$152K). 0
- Engineering for implementation of Automated Workstations on the NEACP to provide communications operator support, equipment control, and patch & test (Sep 96; \$100K).
  - Engineering for implementation of new red/black voice switching systems on the NEACP (Jun 96; \$122K). 0
- Engineering for qualitative operational test and evaluation of major NEACP improvements (Sep 96; \$65K)
- Providing technical analysis of NMCC and NMCC Site R operational requirements and development of engineering alternatives to improve strategic and crisis capabilities (Sep 96; \$140K). 0
  - Providing technical support for operational evaluation of FOC Special Technical Operations communications (May 96; \$132K). Engineering for implementation of new consolidated red/black voice switching systems for NMCC and NMCC Site R (Sep 96; \$180K).
- Integration engineering and transition planning for critical NMCC C3 systems in response to the new NMCC Pentagon renovation for design of facilities and communications systems (Sep 96;
- \$1.221M Total

FY 1997 Plans:

- Technical analysis for implementation of improvements to NEACP and SAM aircraft (Sep 97; \$100K).
- Engineering support for qualitative operational test and evaluation of major NEACP improvements (Sep 97; \$75K). 0
  - 0
- Trouble-shooting and support of current NEACP operations (Sep 97; \$150K).
- Development of overall and individual systems and subsystem engineering, transition plans and test plans for moving the NMCC to another location in the Pentagon (May 97; \$666K). Engineering evaluation of new emergency message and TW/AA systems for the NMCC and NMCC Site R (Sep 97; \$180K). 0
  - Integration engineering and transitioning secure NMCC systems to the DMS (Feb 97: \$97K).
    - \$1.268M Total

0

Work Performed By: MITRE, VA; Electrospace Systems, Inc., Arlington, VA; Booz-Allen & Hamilton Inc., Arlington, VA.

RDT&E BUDGET	GETIT	EM J	JSTIF	ITEM JUSTIFICATION SHEET	N SHE		(R-2 Exhibit)	t)		DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07							R-1 ITEM National Mi	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	URE System (NIMCS	-Wide Support	/0302016K	
COST (in millions)		T.	FY95	FY96		FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Command Center Engineering/S32		1.314	4	1.22.1	1.268	58	1.315	1.337	1.359	1.378	Contg	Contg
B. Program Change Summary: Previous President's Budget (FY1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget	nt's Budget			EY95 1.314 1.314 0	EY96 1.336 1.336 115	26 36 36 15	EY97 1.344 076 1.268					
Change Summary Explanation: N/A FY96 reductions due to Congressional adjustments to Defense-wide investment appropriations. FY97 reduction due to revised inflation rates.	stments to Do	efense-w	ide investr	nent approp	riations.							
C. Other Program Funding Summary:	ıoi	FY96	EY97	FY98	FY99	EY00		Budget to Complete	Total Cost			
O&M 0302019K	./03	769.	.427	7/6	.224	<u>57</u> .	.013	Contg	Contg			
								· ·				
					Page 11 of 17	1 of 17						

	RDT&E BUD	BUD	RDT&E BUDGET ITEM JUST		FICATION SHEET		(R-2 Exhibit)	xhibit)		DATE: March 1996	rch 1996	
APPROPRIAT RDT&E, Defen	RIATION/BUDGET ACTIVITY Defense Wide/07	TIVIT	<b>.</b>				R-1 ITEM National Mi	R-1 ITEM NOMENCLA National Military Comman	ATURE ind System (N	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	upport/03020	16K
ٽ	COST (in millions)			FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
NMCS Command	nmand Center Engineering/S32	2		1.314	1.221	1.268	1.315	1.337	1.359	1.378	Contg	Contg
D. Schedule Profile:	<u>[e:</u>											
FY1995 2r		lop new	5-year contrac 5-year contrac	t for NMCS E	Develop new 5-year contract for NMCS Engineering Test & Evaluation. Develop new 5-year contract for Command Center System Engineering.	& Evaluation. Engineering.						
FY1996 2r	4th quarter: Prepar 2nd quarter: Develo 4th quarter: Develo	re initial lop Optic op Optic	overall systen on Year 1 of c	n transition eng ontract for NIV ontract for Cor	Prepare initial overall system transition engineering plan for new NMCC.  Develop Option Year 1 of contract for NMCS Engineering T&E.  Develop Option Year 1 of contract for Command Center System Engineering.	r new NMCC. T&E. ystem Engineer	ii.					
4t <u>FY1997</u> 1s		de syster de User	n engineering Test & Evalua	for implement tion criteria for	Provide system engineering for implementation of new NEACP red Provide User Test & Evaluation criteria for NEACP Mod Block V.	ACP red/black Block V.	voice switching	system.				
2 4 4	4th quarter: Compi	lop Optic lop Optic	on rear 2 of con Year 2 of continuering for sy	ontract for Cor	Develop Option I car 2 of contract for NMCS Engineering 1 & E.  Develop Option Year 2 of contract for Command Center System Engineering.  Complete Engineering for systems transition of new NMCC.	1 & E. System Engineer	ring.					
							·					
300 A S M A												
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					Ъ	Page 12 of 17						

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	JECT COST BREA	KDOWN (R-3)		DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCLATURE National Military Command Syste NMCS COMMAND CENTER E	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Sup NMCS COMMAND CENTER ENGINEERING (S32)	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/ NMCS COMMAND CENTER ENGINEERING (S32)	802016K/
A. Project Cost Breakdown(\$000)					
Project Cost Catagories					
a. System Engineering FY95. 1,314	FY96 1,221		EY97 1,268		
B. Budget Acquisition History and Planning Information (\$000)					
Support and Management Organizations:					
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Pride Date EAC EAC EAC	Prior to Budget EY95.	Budget FY96	Budget FY97	Budget To Complete	Total <u>Program</u>
	1,314	1,221	1,268	Contg	Contg
Multiple Performing Activities					•
Government Furnished Property: N/A					
TOTAL PROJECT	1,314	1,221	1,268		
	Demo 12 of 17		ţ		
	rage 13 01 17				

R-1 Shopping List UNCLASSIFIED

RDT&E BUD	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	STIFICAT	FION S	HEET (R	-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y				R-1 ITEM   National Mil	R-1 ITEM NOMENCLATURE National Military Command System	ATURE nd System (N	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	upport/03020	.6K
COST (in millions)	FY95		FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Support to Defense Support Activity/Z60	399	.374		.400	.415	.432	.445	.460	Contg	Contg

# A. Mission Description and Budget Item Justification:

Research is also provided in a number of areas of special interest to the OSD's theater tactical ballistic missile defense community and Precision Guided Munition (PGM) communities, as well as the defense planning community, and the acquisition and employment policy making communities. It also support systems engineering, development of state-of-the-art technologies and the customers supported are actual DoD policy decision makers. Z60 supports basic research and the acquisition and enhancement of software that aids in the illumination of counter-proliferation issues. This project provides direct support to the Defense Support Activity (DSA) as prescribed in DoD Directive 5100.81. This project is unique in terms of the policy decisions supported and that the translation of these technologies into leading edge analytical models. Acquisition of support is provided by competitively awarded contracts.

### FY 1995 Accomplishments:

- ed optimal configuration of weapon systems and integral Battle Management Command, Control, Communications Examined the Theater Missile Defense (TMD) Architecture and propos and Computer Systems (Sep 95; \$70K).
  - Provided analysis for Cruise Missile Defense (CMD) Plan to assess current and projected threat and appropriate defensive capabilities to effectively counter the threat (Sep 95; \$30K)
- Developed a mathematical TMD munitions inventory analysis model and Radar Cucing effectiveness model to improve sensor-to-shooter effectiveness in Theater Missile Defense programs (Sep 95; \$99K).
- Evaluated the effects of chemical and biological munitions on aircrews and the impact on aircraft generation rates; influenced policies on military response to aggressor actions involving Provided ASD(ISP) a view of round shock effects to critically important offset axis deeply buried targets; used in evaluating effectiveness of current and projected weapon systems to penetrate strategic military sites (Sep 95; \$100K)
  - these types of munitions (Sep95; \$100K).

#### FY1996 Plans:

- warfighting operational plans' compliance with the Secretary's guidance and to rapidly illuminate policy issues. This development will focus on illustrating PGM effects and optimal deployment of theater missiles defenses (Sep 96; \$96K). Continue to develop analytical tools used to support assessment of joint 0
  - Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas: 0
    - 1) the probability of structural damage to deep underground targets, and
- 2) the effects of chemical and biological munitions on military operations (Sep 96; \$90K). Analyze the potential contributions of Navy Upper Tier defensive systems (Sep 96; \$96K).
- and ballistic missile defensive systems, technologies, logistics, and architectures (Sep 96; \$55K). Develop analytical tools for the study of both the cruise missile defense 0 0
  - ic missile threats evolve (Sep 96; \$37K). Provide research support to the USD(A) as the cruise missile and ballist
    - \$.374M Total

RDT&E BUDGET ITEM JUSTIFICATION SHEET	ITEM JUSTI	FICATION		(R-2 Exhibit)			DATE: March	ırch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM   National Mil	R-1 ITEM NOMENCLATURE National Military Command Syste	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	ACS)-Wide St	1pport/030201	6K
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Support to Defense Support Activity/260	.399	.374	.400	.415	.432	.445	.460	Contg	Contg
EY1997 Plans:  Continue to develop analytical tools used to support assessments of joint warfighting operational plans' compliance with the Secretary's guidance and to rapidly illuminate policy issues  This development will focus on illustrating PGM effects and optimal deployment of theater missile defenses (Sep 97; \$100K).  Continue to acquire and enhance leading edge analytical tools to rapidly illuminate policy issues in the following areas:  1) the probability of structural damage to deep underground targets, and  2) the effects of chemical and biological munitions on military operations (Sep 97; \$100K).  Examine the effectiveness of current and planned defensive systems against emerging threats (Sep 97; \$100K).  Develop analytical tools for the study of both the cruise missile defense and ballistic missile threats evolve (Sep 97; \$50K)  Provide research support to the USD(A) as the cruise missile and ballistic missile threats evolve (Sep 97; \$50K)	to support assessment g PGM effects and opedge analytical tools to to deep undergrounical munitions on miliplanned defensive systhe cruise missile at the	ts of joint warfighting operational plans' compliance with the Septimal deployment of theater missile defenses (Sep 97; \$100K). To rapidly illuminate policy issues in the following areas: nd targets, and itary operations (Sep 97; \$100K). Stems against emerging threats (Sep 97; \$100K). defense and ballistic missile defensive systems, technologies, lond ballistic missile threats evolve (Sep 97; \$50K)	ting operationa t of theater mis te policy issues Sep 97; \$100K rging threats (a stic missile defe threats evolve	Il plans' compliant sile defenses (Set in the following). Sep 97; \$100K). Sep 97; \$100K).	nce with the Se ep 97; \$100K).  garcas: cchnologies, log	cretary's guidan	retary's guidance and to rapidly illuming stics, and architectures (Sep 97; \$50K)	y illuminate poli 7; \$50K)	cy issues.
B. Program Change Summary:		EVO¢ EV		703					
Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year since FY96 President's Budget			.405 .405 .031	.413					
Current Budget Submit/President's Budget		399 .3	.374	.400					
Change Summary Explanation: FY96 reductions due to Congressional adjustments to Defense-wide investment appropriations. FY97 reductions due to revised inflation rates.	ents to Defense-wide	investment appr	priations.						
C. Other Program Funding Summary: Not applicable.									

APPROPRIATION/BUDGET ACTIVITY  RDT&E, Defense Wide/07  COST (in millions)  Support to Defense Support Activity/Z60  D. Schedule Profile:  Fiscal Year actual and planned events by quarter  Fiscal Year actual and planned events by quarter  Annual Contract Renewal  X	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	SHEET (R-	-2 Exhibit)			DATE: March 1996	ch 1996	
FY95 1 2 3 4 1 X			R-1 ITEM I National Mil	R-1 ITEM NOMENCLATURE National Military Command System	TURE d System (NIA	ICS)-Wide Su	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K	6K
EY95 1 2 3 4 1 X	5 FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
FY95 1 2 3 4 X	.374	.400	.415	.432	.445	.460	Contg	Contg
1 2 3 4 X X								
	EY96 1 2 3 4	EY97	4					
	×	×						
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	BREAKDO	WN (R-3)	WN (R-3)	DATE: March 1996	<b>TE:</b> March 1996
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 IT Nation	R-1 ITEM NOMENCL. National Military Comman	R-1 ITEM NOMENCLATURE National Military Command System (N SUPPORT TO DEFENSE SUPPORT	R-1 ITEM NOMENCLATURE National Military Command System (NMCS)-Wide Support/0302016K/ SUPPORT TO DEFENSE SUPPORT ACTIVITY (260)	, 1/0302016K/
A. Project Cost Breakdown(\$000)					
Project Cost Catagories		EY95		FY96	EY97
a. Basic Research and Software Analysis		399		374	400
Total		399		374	400
B. Budget Acquisition History and Planning Information (\$000)					
Support and Management Organizations:					
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC EAC	Budget FY95	Budget EX96	Budget EX97	Budget To T. Complete P.	Total Program
	399	374 4	400	Contg	Contg
Multiple Performing Activities					
Government Furnished Property: N/A					
Total Project	399	374 4	400		
Fage	Fage 1/ of 1/				

RDT&E BUDGET ITEM JUST		IFICATION SHEET (R-2 Exhibit)	SHEET (R	2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLATI Joint/Defense Information Sy	URE	URE stems Engineering and Integration/0302019K	ion/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Total Program Element (PE) Cost	9.774	3.745	4.594	4.740	4.999	5.435	2.897	Contg	Contg
MILSATCOM & Defense Information Infrastructure Planning/E61	6.871	0	0	. 0	0	0	0	Contg	Contg
Defense-Wide C3 Architecture & Planning/T62	.166	1.323	1.399	1.470	1.551	1.717	1.885	Contg	Contg
Theater C3 Technical Integration/T63	989.	.447	*0	0	0	0	0	Contg	Contg
Technology Advancement/A19	.491	.349	.361	.367	.362	.377	.393	Contg	Contg
Special Projects/T64	1.210	1.100	1.155	1.205	1.253	1.394	1.541	Contg	Contg
CINCUSACOM Support/T65	.350	.526	*0	0	0	0	0	Contg	Contg
CINC/JTF C4 Integration/T66	0	0	1.679	1.698	1.833	1.947	2.078	Contg	Contg

A. Mission Description and Budget Item Justification:

command, control, and communications (C3) systems to ensure the affected systems continue to be responsive in current, dynamically changing environments. These activities involve all MILSATCOM develops planning guidance backed by analysis and data to support OSD, the JS, and the CINCs in prioritizing their Command and Control (C2) requirements and acquisitions. This program element is systems and other joint/national level systems which necessitate a high degree of multi-service/agency planning and development. Included are technical support and engineering integration to facilitate compliance with standards and technical architectures and to improve the command centers of the Unified and Specified (U&S) Commands. Technical support in the above mentioned activities is provided to the Office of the Secretary of Defense (OSD), the Joint Staff (JS), Unified and Specified Commands (CINCs), the Military Departments and Defense Agencies. This program element This program provides overall system analysis, architectural development, system engineering, integration, and developmental engineering responsibilities for joint and national level under Budget Activity 07 because it involves efforts supporting operational systems development.

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<sup>\*</sup>Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	TEM JUSTI	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	n 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N Joint/Defense ]	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En	TURE tems Engineeri	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
MILSATCOM & DII PLANNING/E61	6.871	*0	0	0	0	0	0	Contg	Contg

A. Mission Description & Budget Item Justification:

requirements to rapidly project forces anywhere in the world. This project supports the planning and decision management to provide responsive communications and information services to support the evolving military missions. The efforts support integrated DOD satellite communications planning and investment strategy including all Military Satellite Communications (MILSATCOM) systems and (AITS-JPO) integrated advanced technology research and development efforts from ARPA and others, focus the flow of these technologies from R&D to widespread experimental uses, to leading edge utility and from leading edge utility to maximize the potential for migration into the DII and the National Information Infrastructure (NII). The DISA funding under this program allowed the AITS-JPO DISA goal of quality information services at an affordable cost through a deliberate decision management process. The DISA/ARPA Advanced Information Technology Services Joint Program Office acquisition roadmap provide guidance to the Department, Services, and Agencies for the acquisition and upgrade of MILSATCOM systems and the cost effective acquisition of commercial SATCOM services. The Joint C4I Communications Decision Support Center (JCDSC) is provided for the Joint Staff as the single DOD source of validated requirements. This work is essential to achieve the The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and military operations requiring greater flexibility to meet the global warfighting commercial SATCOM capabilities, and the integrated SATCOM planning and decision management for the Defense Information Infrastructure (DII). The SATCOM investment strategy and to leverage research and development funding and efforts.

\*This project is being moved to PE0303126K starting in FY96. Only FY95 work is described here. FY96 and beyond efforts are reported in the PE0303126K summary.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	TEM JUSTI	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM I	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En	TURE stems Engineer	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
MILSATCOM & DII PLANNING/E61	6.871	0	0	0	0	0	0	Contg	Contg

### (U) FY 1995 Accomplishments:

- Updated the JCDSC (development and operations) (Contg/\$1,410K).
- Update SATCOM Investment Strategy and Roadmap, revise commercial SATCOM acquisition plan, and update SATCOM/DII Integration (Contg/\$1,118K)
  - Assess DII architectures and decision roadmaps and provide integrated acquisition decision management decision guidance and direction (Contg/\$1,318K).
    - Provide oversight and direction for DISA Special Projects (Contg/\$450K)
- Monitor candidate information system technologies and capabilities which are still in research and development for potential integration into the AITS-JPO Pilot Service portfolio (Contg/\$100K).
  - Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstration in support of leading edge technology services (Contg/\$300K).
- Develop and coordinate plans and strategies for migration and integration of selected Leading Edge Services into DISN (Contg/\$800K) 0

Evaluate available candidate AIT services versus user requirements and select promising technologies for pilot service (Contg/\$700K)

- Integrate modeling and simulation and High Performance Computing Wide Area Networks (Contg/\$300K). 0
- Provide oversight for introduction of standards based video teleconferencing into the Defense Simulation Internet (DSI) (Contg/\$50K).
  - Initiate engineering analysis to extend bandwidth on demand and end-to-end security services to deployed forces (Contg/\$50K)
    - Consolidate leading edge service and network management functions into an integrated Management Prototype (Contg/\$200K)
      - Collaborate with NSA on the development phase of key agile security device (Contg/\$75K).

\$6.871M Total

SETA support contract (CPFF-LOE) was competitively awarded in FY94Q3 and consists of a base year and 4 option years. Acquisition strategy:

Service (e.g., the Army, for MITRE). FFRDC support is procured sole source through the sponsoring

RDT&E BUDGET ITEM JUST		FICATION SHEET	N SHEET (	(R-2 Exhibit)			DATE: March 1996	n 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N Joint/Defense ]	ITEM NOMENCLA Defense Information Sys	TURE	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
MILSATCOM & DII PLANNING/E61	6.871	0	0	0	0	0	0	Contg	Contg
B. Program Change Summary  Drevious President's Rudget (FV 1996)				Ed vo	EY95 6.653	타	EY96	EY97	97
Appropriated Value Adjustments to Appropriated Value				; · · · ·	6.653 + .218				
Change Summary Explanation:  FY95 increase reflects additional emphasis on the integration of leading edge technologies across all DISA functional areas.	ation of leading ea	lge technologies	s across all DISA	o. . functional areas.	<b>.</b>				
C. Other Program Funding Summary: Not Applicable									
D. Schedule Profile;   Execute SETA support option year.   FY95 3rd quarter: Execute FFRDC support MIPRs.   4th quarter: SOW for SETA support.	n year. PRs.								
* Funding for this project has been moved to P.E. 0303126K beginning in FY96.	K beginning in F	Y96.							
	X		Page 4 of 25			0			

APPROPRIATION/BUDGET ACTIVITY         R-1 IFEM NOMENCIATURE           RDTACE, Defense Wide/OT         A Engiet Coat-Brankforum           A Engiet Coat-Brankforum         EV95         EV92           Project Coat-Brankforum         EV95         EV97           Project Coat-Brankforum         EV96         EV97           Project Coat-Brankforum         2,240         Refer to P.E. 0303156X           Systems analysisk design & reprogramming         2,218         Refer to P.E. 0303156X           Finginteering & Technical Service         6,871         6,871           Rotal         B. Backet Acquiniston History and Plumins Information         6,871           N/A         N/A	RDT&E PROGRAM ELEMENT/PROJECT	COST	(R-3)	DATE: March 1996
rect Cost Directedown  st Cost Categories  st Cost Categories  st Cost Categories  2,440  Refer to P.E. 0303126K 2,218  gline-ring & Technical Service  6,871  diget Acquisition History and Planning Information  A  Page 5 of 25			R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engi	gineering and Integration/0302019K
An A A A A management Support Services 2440 Refer to P.E. 03 19 19 19 19 19 19 19 19 19 19 19 19 19	A. Project Cost Breakdown Project Cost Categories	FY95	<u>FY96</u>	FY97
AAA	Management Support Services Systems analysis; design & reprogramming Engineering & Technical Service	2,440 2,213 2,218	Refer to P.E. 0303126K	
Budget Acquisition History and Planning Information  N/A	Total	6,871		
Page 5 of 25	B. Budget Acquisition History and Planning Information			
Page 5 of 25	N/A			
Page 5 of 25				
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Page 5 of 25				
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R-1 Shopping List UNCLASSIFIED

RDT&E BUD	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	TFICATION	V SHEET (	R-2 Exhibi	<b>t</b> )		DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y.			R-1 ITEM Joint/Defense	R-1 ITEM NOMENCLAT Joint/Defense Information Syst	TURE stems Engineer	<b>FURE</b> tems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Defense-Wide C3 Architecture & Planning/T62	.166	1.323	1.399	1.470	1.551	1.717	1.885	Contg	Contg

## A. Mission Description & Budget Item Justification:

This project encompasses two efforts: (1) The first effort provides the interoperability and integration of resources essential to the achievement of a Global C4I Infrastructure that will be "seamless" to the user. This is accomplished through a multi-level planning program which includes four elements: (a) The Defense Information Infrastructure (DII), which integrates all DOD information systems, planning for interoperability and integration of C4I for the Warrior. This is accomplished through the development of enterprise, mission, functional and technical architecture products. These products sensors, data storage services, communications networks, and computer storage devices to provide collection, processing, storage, display and information transfer, (b) DII Technology Insertion, which provides assessment of the utility of new technology through high level performance simulation of the DII; (c) The Defense Information Systems Network (DISN) which addresses the fixed commonuser systems, treating the long haul communications, base-level, and rear-area tactical communications as an end-to-end system with particular focus on user requirements, technology and standards, DOD overall improved operational performance and reduced costs through common architecture standards and features and services, security, and network management; (d) the DISN Security which includes current and future DISN security initiatives for communications. (2) The second effort provides depict how all DOD systems, to include information, sensors, data storage services, and communications networks provide collection, processing, storage, display and information transfer. It incorporates the DII and National Information Infrastructure (NII). This project gives interfaces, and a sharing of assets and capabilities.

### (U) FY 1995Accomplishments:

- Develop the Global Command and Control System (GCCS) base-line architecture for the remaining eight CINCs to include all Warrior Joint, Combined or Allied components operating in the Theaters (Jan 95; \$166K)
  - \$.166M Total

### (U) FY 1996 Plans:

- Provide major update of DISN architecture guidance based on FY95 accomplishments together with technology and standards evolution (Sep 96; \$471K). 0
  - o Initiate DISN transition plan in support of Global Grid (Sep 96; \$341K).
- Develop, enhance and apply engineering tools for the computer-aided networks topology design and analysis of current operational DISN networks, planned future DISN networks and service offerings, and proposed alternative future DISN/DII architectures, particularly using ATM and SONET (Sep 96; \$511K). \$1.323M Total

45

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ITEM JUST	FICATION	SHEET (	R-2 Exhibit	(1		DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM I Joint/Defense	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	TURE stems Engineeri	ng and Integration	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Defense-Wide C3 Architecture & Planning/T62	.166	1.323	1.399	1.470	1.551	1.717	1.885	Contg	Contg
				Control on					

### (U) FY 1997 Plans:

- o Initiate analysis of protocols needed for the goal DISN as a GIGABIT network; analysis of congestion control techniques for the goal DISN as a GIGABIT network; perform trade-off analysis of services provided versus threats encountered in the global DISN (Sep 97; \$495K).
  - Continue development of DISN transition strategy and plan in support of Global Grid based on FY96 accomplishments and assess global telecommunications state-of-the-art (Sep 97; \$358K)
- Continue to develop, enhance and apply engineering tools for the computer-aided network topology design and analysis of current operational DISN networks, planned future DISN networks and service offerings, and proposed alternative future DISN/DII architectures, particularly using ATM and SONET. (Sep 97; \$546K). \$1.399M Total

Acquisition Strategy: The MITRE Corporation, McLean, VA; Booz-Allen & Hamilton, Inc., Bethesda, MD; The Institute for Defense Analysis, Alexandria, VA; Artel, Inc., Reston, VA; Logicon, Reston, VA; Computer Sciences Corporation.

# B. Program Change Summary

	FY95	FY96	<b>EY97</b>
Previous President's Budget (FY 1996)	.166	1.869	1.756
Appropriated Value	.166	1.869	
Adjustments to Appropriated Value	0	546	
Adjustments to Budget Year Since FY 96 President's Budget			357
Current Budget Submit/President's Budget	.166	1.323	1.399
Change Summary Explanation:			

FY96 reduction due to Congressional adjustment of Defense-wide investment appropriations and below reprogramming threshold. FY97 reduction due to revised fiscal guidance.

### C. Other Program Funding Summary

Related RDT&E: Relates to other projects in P.E. 0302019K

	RDT&E BUDGET ITEM JUSTI	GET ITEM	M JUSTIF	USTIFICATION SHEET (R-2 Exhibit)	SHEET (R-2	-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUD RDT&E, Defense Wide/07	ATION/BUDGET ACTIVITY  cense Wide/07					R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLATI	URE	URE stems Engineering and Integration/0302019K	tion/0302019K	
COST (in millions)	nillions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Defense-Wide C3 Architecture & Planning/T62	ecture &		.166	1.323	1.399	1.470	1.551	1.717	1.885	Contg	Contg
D. Schedule Profile											
-	Develop Integrated Network and System Management Architecture.	work and Syste	m Managemen	t Architecture.							
	Publish major update of Global DISN Architecture.	f Global DISN	Strategy. Architecture.								
FY97 2nd quarter:	Develop CINC Architecture to support GCCS.  Publish Analysis of Global DISN Services versus Threats.	cture to supported DISN Services	t GCCS. Ices versus Thre	sats.							
2nd quarter:	Publish C4I Migration Strategies to GCCS Target.	Strategies to G	CCS Target.								
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8	DT&E PRO	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	EMENT/	PROJECT	COST BI	REAKDO	WN (R-3)		DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	**************************************	TIVITY				R-1 I Joint/ C3 A	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems C3 Architecture & Planning (T62)	rure ystems Enginecrin (T62)	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/Defense-Wide C3 Architecture & Planning (T62)	019K/Defense-Wid
A. Project Cost Breakdown	<u>uv</u>									
Project Cost Categories					F 195		F Y 96	FY97	/6	
a. Systems Engineering	∞0				166		1,323	1,3	1,399	
Total					166		1,323	1,3	1,399	
B. Budget Acquisition History and Planning Information	story and Plann	ing Information								
Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle	pe Award or Obligation Date	Performing Activity <u>EAC</u>	Project Office EAC	Prior to FY95		Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total <u>Program</u>
Multiple SS/C Performing CPAF Activities CPFF MIPR WR						166	1,323	1,399	Contg	Contg
Government Furnished Property: N/A	operty: N/A									
Total Project						166	1,323	1,399		
					Page 9 of 25	.25				

R-1 Shopping List UNCLASSIFIED

RDT&E BUD(	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	IFICATION	SHEET (	R-2 Exhibit			DATE: March 1996	th 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y			R-1 ITEM P Joint/Defense	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En	TURE	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Theater C3 Technical Integration/T63	989.	.447	<b>0</b>	0	0	0	0	Contg	Contg

A. Mission Description & Budget Item Justification;

tactical and strategic as well as tactical-to-tactical switched systems and to provide C3 capabilities that contribute to mission accomplishment. This project supports DISA's designated responsibilities as support is near-term, externally focused and user oriented; the recommendations are developed in coordination with the warfighting planners. This project provides the technical guidance to CINC and global C3I infrastructure. USCENTCOM, USEUCOM, and USSOUTHCOM depend on this project to correct existing C3 deficiencies which have significant operational impacts. This Information Management (CIM), and Defense Information Infrastructure (DII) concepts, evolving architectures and standards into the theater commands, thus contributing to the achievement of the the technical integrator for tactical to DISN switched systems and as the integrator for all DOD communications network management systems. In addition, it provides a method to inject Corporate to the warfighting and supporting CINCs to overcome deficiencies in the interface and management between n of tactical switched systems and associated network management into the Strategic Network in a seamless Service C4I system development to ensure that both CINC and Service programs incorporate and are consistent with the DISN Goal Architecture and C4IFTW This project provides technical engineering support to ensure technical integration architecture that supports the C4IFTW concept. The project provides support directly guidance.

\* Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

RDT&E BUDGET ITEM JUSTI	I ITEM JUSTIF	FICATION SHEET (R-2 Exhibit)	SHEET (R	-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLAT	URE	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	tion/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Theater C3 Technical Integration/T63	989.	.447	0	0	0	0	0	Contg	Contg

### (U) FY 1995 Accomplishments:

- Provide engineering support to objective system for Joint Network Management (JNM) Program (Sep 95; \$251K).
  Initiate engineering support for a special purpose data circuit multiplexer to be placed in the Ground Mobile Forces (GMF) Gateways in support of the seamless Strat/Tac interface (Sep 95; \$120K).
- use in the Joint Task Force (JTF) objective architecture (Sep 95; \$64K). Initiate prototype evaluations of COTS Switching candidate hardware for
  - Evaluate COTS Joint Communications Planning and Management System (JCPMS) candidates for use in switching network (Sep 95; \$40K).
    - Provide engineering support in the transition of Integrated Tactical Secure Data Network (ITSDN) into Service Programs (Sep 95; \$80K).
      - Develop Joint Integrated Tactical Communicators Architecture (Mar 95; \$131K).

\$.686M Total

#### (U) FY 1996 Plans:

- Provide engineering for Joint Communications Planning and Management System (JCPMS) Planning and Management Support (Sep 96; \$223K). 0
- Develop architecture documentation and provide support necessary for implementation of the Joint Task Force Tactical Communications Architecture, provide technical support for the Joint Task Force interoperability work, and assist with solving JTF interoperability problems referred to DISA for resolution. (Sep 96; \$224K).

**\$.447M Total** 

Acquisition strategy: Booz-Allen & Hamilton, Inc., Bethesda, MD; The MITRE Corporation, McLean, VA; Logicon Eagle Technology, Inc., Reston, VA and Winter Park, FL.

RDT&	RDT&E BUDGET ITEM JUSTIFIC	TEM JUST		SHEET	(R-2 Exhibit)			DATE: March 1996	ıh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ACTIVITY				R-1 ITEM No Joint/Defense In	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	TURE stems Engineeri	ng and Integrati	on/0302019K	
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Theater C3 Technical Integration/T63	33	989.	.447	*0	0	0	0	0	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget	1996) ue e FY96 President's Bu	ıdget	EY95 .679 .679 +.007	EY96 .927 .927 480	<b>₫</b>	EY97 .871 871				
Change Summary Explanation:  FY96 reduction due to Congressional adjustment of Defense-wide appropriations and below threshold reprogramming.  * In FY97, funding for this project was combined with Project T65 in a new project, T66.	ngressional adjustments project was combined	t of Defense-widd	s appropriations a 5 in a new projec	nd below threshort, T66.	old reprogrammir	<b>18</b>				
C. Other Program Funding Summary	검									
	E	FY95 FY96	96 . FY97	7 Total Cost	)ost					
Operation and Maintenance:	Ŏ.	.044 .027	7 .025	Contg						
Related RDT&E: Other projects in PE #0302019K.	E #0302019K.									101
D. Schedule Profile FY95 1st quarter: Final Tactic 2nd quarter: Joint Requi 3rd quarter: Publish JIT 4th quarter: JITS Milest	Transition/Implementation Plan for Joint Integrated Tactical Switch (JTTS).  Final Tactical Switching Goal Architecture Published.  Joint Requirement Oversight Council (JROC) briefing on JTTS.  Publish JTTS Operational Requirements Document (ORD).  JTTS Milestone O/II Review.	or Joint Integrate chitecture Publish ancil (JROC) brick ments Documen	d Tactical Switch ted. fing on JTTS. t (ORD).	ı (JITS).						

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		Total Cost	Contg	
1996	on/0302019K	Cost of Complete	Contg	
DATE: March 1996	ng and Integrati	FY01	0	
	'URE ystems Engineeri	FY00	0	
	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	FY99	0	
(R-2 Exhibit)	R-1 ITEM NOMENCLAT Joint/Defense Information S	FY98	0	
HEET (R-		FY97	0	TEP).
FICATION SHEET (R-2 Exhibit)		FY96	.447	ution Plan (CSR
		FY95	989.	S prototypes.  ns Network Mar  uting Task Exect
GET ITE				valuation of JIT iew. Communication cuit Switch Rou
RDT&E BUDGET ITEM JUSTI	LATION/BUDGET ACTIVITY fense Wide/07	ullions)	Fechnical Integration/T63	Limited Testing and Evaluation of JITS prototypes.  JITS Milestone III Review. Initial Fielding of Joint Communications Network Management Tool. Issue RFP for JITS. Fielding/Retrofit of Circuit Switch Routing Task Execution Plan (CSR TEP).
		COST (in millions)	F,	1st quarter: 2nd quarter: 3rd quarter: 3rd quarter:
	APPROPR RDT&E, De		Theater C3	FY96

	RDT	ADT&E PROC	GRAM EL	EMENTA	PROJECT C	OST BREA	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	3)	DATE: March 1996	rch 1996	
APPROPRI RDT&E, De	PRIATION/BUDGET ACTIVITY Defense Wide/07	GET ACTI	VITY				R-1 ITEM NOMENCL Joint/Defense Information S Technical Integration (T63)	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Er Technical Integration (T63)	gineering and Integra	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/Theater C3 Technical Integration (T63)	
A. Project Cost Breakd Project Cost Categories	Project Cost Breakdown ject Cost Categories					FY95	<b>EY96</b>		EY97		
a. Systen	Systems Engineering					989	447		0		
Total						989	447		*0	•	
B. Budget Ac Support and Ma	B. Budget Acquisition History and Planning Information Support and Management Organizations	y and Planning zations	Information								
Contractor or Government Performing Activity	Contract Method/Type or Funding	Award or Obligation Date	Performing Activity <u>EAC</u>	Project Office EAC	Prior to EY95	Budget FY95	Budget EY96	Budget EY97	Budget To Complete	Total Program	
Multiple Performing Activities	SS/C CPAF CPFF MIPR WR					989	447	•	Contg	Contg	
Government F	Government Furnished Property: N/A	rty: N/A									
Total Project:						989	447	0			
* Beginning F	Y 1997, Projec	ts T63 and T6.	5 are combined	into a new prc	Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.	'4 Integration", T	.99				
						Page 14 of 25					

R-1 Shopping List UNCLASSIFIED

APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07 COST (in millions) FY95 FY96 FY97 FY98					
FY95 FY97	R-1 ITEM N Joint/Defense Is	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	Igineering and Integra	tion/0302019K	
		FY99 FY	FY00 FY01	Cost of Complete	Total Cost
Technology Advancement/A19 .367 .367		.362 .377	.393	Contg	Contg

Mission Description & Budget Item Justification:

The rapid evolution of the global military environment is driving a major evolution of the DoD force structure and military operations, requiring greater flexibility to meet the global warfighting requirements to rapidly project forces anywhere in the world. This project supports the development of a DoD-wide Defense Interactive Simulation (DIS) compliant C4I simulator. Models of the Defense Information Infrastructure (DII) support mission testing, training and operation activities, and integration with Joint Warrior Simulation (JWARS)/Joint Simulation System (JSIMS)

### (U) FY 1995 Accomplishments:

- Begin development of a prototype C4I model. ((Continuing: \$400K)
- Developed C4I prototype models to assess CINC operational plans (Continuing; \$91K)

### \$.491M Total

(U) FY 1996 Plans:

- Development of an initial operating capability. (Continuing; \$349K) 0
  - \$.349M Total

#### (U) FY 1997 Plans:

- Integrate theater level force deployment models. (Continuing; \$223K)
- (Continuing; \$138K) Begin full-scale integration with Warrior Simulation (WARSIM) 2000. 0 0
  - \$.361M Total

RDT&E BUDGET ITEM JUST	JDGET ITEM		FICATION SHEET	N SHEET (	IFICATION SHEET (R-2 Exhibit)			DATE: March 1996	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	/ITY				R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLAT Joint/Defense Information Syst	TURE tems Engineeri	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Technology Advancement/A19		.491	.349	.361	.367	.362	.377	.393	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget	President's Bu	dget	EY95 .491 .0	<b>S</b>	EY96 .479 130	EY97 .473				
Change Summary Explanation:  FY96 reduction due to Congressional adjustment of Defense-wide appropriations and below threshold reprogramming.  FY97 reduction due to revised inflation rates.	nal adjustment ation rates.	of Defense-wide	: appropriations	and below thres	hold reprogramm	ng.				
C. Other Program Funding Summary:			FY95	S	FY96	FY97	I	Total Cost		
PE0303126K Project E61 MILSATCOM and DII Planning				0	0	0.500	D	Continuing		
D. Schedule Profile: Fiscal Year actual and planned events by quarter.	y quarter.									
			FY95	-	EY96 2 3 4	EY97				
Contract Milestones  Execute option year of technical support contract	pport contract		×		×	×				
			·	Page 16 of 24		•				
				1 age 10 01 23						

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	(R-3)	DATE: March 1996
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE Joint/Defen. Info Sys Eng and Integral	R-1 ITEM NOMENCLATURE Joint/Defen. Info Sys Eng and Integration/0302019K/Technology Advancement (A19)
A. Project Cost Breakdown	FV96	FV97
Project Cost Categories		
a. System analysis, design and programming b. Engineering and Technical Services	249	100
Total	349	361
B. Budget Acquisition History and Planning Information: N/A		
Page 17 of 25	25	

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ET ITEM JUST	TFICATION	N SHEET	R-2 Exhibi	t)		DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07			. A	R-1 ITEM Joint/Defense	R-1 ITEM NOMENCLAT Joint/Defense Information Syst	ATURE stems Engineer	FURE ems Engineering and Integration/0302019K	ion/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Special Projects/T64	1.210	1.100	1.155	1.205	1.253	1.394	1.541	Contg	Contg

A. Mission Description and Budget Item Justification

All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request. This combines projects previously known as Strategic C3 Architecture and Thrift Account.

FY97	1.383			228	1.155
FY96	1.412	1.412	312		1.100
FY95	1.368	1.368	158		1.210
B. Program Change Summary	Previous President's Budget (FY 1996)	Appropriated Value	Adjustments to Appropriated Value	Adjustments to Budget Year Since FY96 President's Budget	Current Budget Submit/President's Budget

Change Summary Explanation: Funding: FY95 adjustment due to below threshold reprogramming.

le appropriations and below threshold reprogramming. FY96 reduction due to Congressional adjustment of Defense-wid FY97 reduction due to revised inflation rates.

C. Other Program Funding Summary

P.E. 0303131K, Minimum Essential Emergency Communications Network (MEECN). Related RDT&E:

D. Schedule Profile

Information will be made available upon request.

	RDI	&E PROC	3RAM EL	EMENT/	PROJECT	COSTB	REAKD	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)		DATE: March 1996	
APPROPRI RDT&E, De	RIATION/BUD Defense Wide/07	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 Joint Proje	R-1 ITEM NOMENCLA Joint/Defense Information Sy Projects (T64)	LATURE Systems Engineerii	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/Special Projects (T64)	2019K/Special
A. Project Cost Breakd Project Cost Categories	Project Cost Breakdown					FY95		<u>FY96</u>		FY97	
a. Systen	a. Systems Engineering					1,210		1,100	. 1,	1,155	
Total						1,210		1,100		1,155	
B. Budget Ac Support and Ma	quisition Histor	Acquisition History and Planning Information. Management Organizations	Information								
Contractor or Government Performing Activity	Contract Method/Type or Funding	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Prior to FY95		Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total
MITRE	SS/CPFF						1,210	1,100	1,155	Contg	Contg
Government Fu	Government Furnished Property: N/A	:: N/A									
Total Project							1,210	1,100	1,155		
						Page 19 of 25	of 25				

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	STIFICATI	ON SHEET	(R-2 Exhibit			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07			R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLA Joint/Defense Information Sys	TURE stems Engineeri	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
CINCUSACOM Support/T65	.526	*0	0	0	0	0	Contg	Contg

A. Mission Description & Budget Item Justification:

This project develops the near and mid-term Command, Control, Communications and Computer (C4) plans for CINCUSACOM, identifies shortcomings in C4 systems and procedures and, when force packaging, UN peacekeeping support and the land defense of CONUS and Canada. Because of this, USACOM's C4 planning encompasses missions much broader than other unified commands Plan significantly increased ACOM's missions, giving the command the responsibility for joint training, joint and will serve as a model for them. Therefore, this project's outputs not only contain the only C4 planning done for specific operational missions but they will also contain key portions of the C4 planning for support to all CINCs' operational missions. Implementation of this project will, therefore, provide global benefits for all the nation's security objectives. appropriate, prototype solutions to those shortcomings. The CJCS Unified Command

- (U) FY 1995 Accomplishments:
  o Integrated other CINC unique system's-based force restructuring and downsizing (Nov 94; \$250K).
  - Develop updated implementation plan (Nov 94; \$100K). \$.350M Total

### (U) FY 1996 Plans:

- Support USACOM's production of their FY96 C4SMP Assessment Update (Sep 96; \$240K).
- Prototype solutions to USACOM C4 deficiencies with global impact and collect data on ACOM's operational use to expedite standardized solution development (Aug 96; \$286K).

\$.526M Total

Logicon Eagle Technology, Inc., Winter Park, FL Acquisition strategy:

\* Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.

RDT&EBU	JDGET II	LEM JUST	RDT&E BUDGET ITEM JUSTIFICATION		SHEET (R-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Er		FURE cms Engineering and Integration/0302019K	on/0302019K	
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
CINCUSACOM Support/T65		.350	.526	*0	0	0	0	0	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget	President's Bu	dget	FY95 368 368 018	EY96 .451 .451 +.075		EY97 .471 471				
Change Summary Explanation:  Funding: FY96 increase due to below threshold reprogramming.  * FY97 funding for this project was combined with Proj	slow threshold project was co	reprogramming. mbined with Pro	ject T63 in a new project, T66.	v project, T66.						
C. Other Program Funding Summary Operation and Maintenance				FY96 .665		EY97 0				
<ul> <li>D. Schedule Profile</li> <li>FY95 1st quarter:         <ul> <li>3rd quarter:</li> <li>FY96 1st quarter:</li> <li>Ath quarter:</li> <li>Delivery of FY95 C4 Systems Master Plan</li> <li>Place tasks on contract</li> <li>Ath quarter:</li> <li>Delivery of FY96 C4 Assessment</li> <li>Ath quarter:</li> <li>Delivery solution recommendations for ACOM evaluation</li> </ul> </li> </ul>	act 24 Systems Maract 24 Assessment 2commendation	ıster Plan 18 for ACOM ev	aluation							
					,					
				Page 21 of 25						

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RDT&E PROGRAM ELEMENT/PROJECT	ROJECT CO	COST BREAKDOWN (R-3)	3)	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCI Joint/Defense Information S CINCUSACOM (T65)	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/ CINCUSACOM (T65)	ing and Integration/03020	19K/
A. Project Cost Breakdown	EVACE	ZOXIII		707	
Project Cost Categories	3	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		7623	
a. Systems Engineering	350	526	0		
Total	350	526	•0	•	
B. Budget Acquisition History and Planning Information Support and Management Organizations					
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Activity Vehicle Date EAC EAC	Prior to Budge FY95	Budget Budget FY95	Budget B EY97	Budget To Total Complete Program	<b>E</b>
	350	526	0	Contg	
Government Furnished Property: N/A					
Total Project	350	526	0		
* Beginning FY 1997, Projects T63 and T65 are combined into a new project, "CINC/JTF C4 Integration", T66.	et, "CINC/JTF C4 Integration"	, T66.			
	Page 22 of 25	5;			

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ITEM JUSTI	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N Joint/Defense	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems En	TURE tems Engineeri	FURE tems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
CINC/JTF C4 Integration/T66	0	0	1.679*	1.698	1.833	1.947	2.078	Contg	Contg

A. Mission Description & Budget Item Justification:

USCENTCOM, USEUCOM, USPACOM, USSOUTHCOM, USSOCOM, USTRANSCOM and USACOM depend on this project to correct existing C4 deficiencies which have significant operational The CJCS Unified Command Plan significantly increased ACOM's missions, giving the command the responsibility for joint training, joint force packaging, UN peacekeeping support and the method to inject Defense Information Infrastructure (DII) concepts, evolving architectures and standards into the theater commands, thus contributing to the achievement of the global C4I infrastructure. land defense of CONUS and Canada. Because of this, USACOM's C4 planning encompasses missions much broader than other unified commands and will serve as a model for them. Therefore, this oriented; the recommendations are developed in coordination with the warfighting planners. This project provides designated responsibilities as the technical integrator for tactical to DISN switched systems and as the integrator for all DOD communications network management systems. In addition, it provides a to the warfighting and supporting CINCs and Joint Task Forces (JTFs) to overcome deficiencies in the interface and management between tactical and strategic as well as tactical-to-tactical switched systems and to provide C3 capabilities that contribute to mission accomplishment. This project supports DISA's the technical guidance to CINC and Service C4I system development to ensure that both CINC and Service programs incorporate and are consistent with the DISN Goal Architecture and C4IFTW This project provides technical engineering support to ensure technical integration of tactical switched systems and associated network management into the Strategic Network in a seamless project's outputs for ACOM contain not only the C4 planning done for specific ACOM operational missions, but they will also contain key portions of the C4 planning for support to all CINCs' architecture that supports the C4IFTW concept. The project provides support directly operational missions. This project's support is near-term, externally focused and user guidance. impacts.

#### (U) FY 1997 Plans:

- Continue engineering support in the transition to commercial switching by the joint tactical network (Sep 97; \$146K).
- Continue engineering effort in the development of a joint communications planning and management system (Sep 97; \$180K).
- e-shelf switching environment (Sep 97; \$107K). Initiate transition strategy that moves the Services into commercial off-th
  - o Provide engineering support in the resolution of combined interoperability problems (Sep 97; \$54K).
- USSOCOM, USSOUTHCOM, USACOM, and USTRANSCOM IAW Joint Staff guidance (Jun 97; \$886K). Develop FY97 C4SMPs for USCENTCOM, USEUCOM, USPACOM,
  - o Continue improvements to the C4SMP development process (Sep 97; \$70K).
- o Develop solutions to C4 deficiencies common to the supported CINCs (Contg; \$236K).
  - \$1.679M Total

Acquisition strategy: Booz-Allen & Hamilton, Inc., Bethesda, MD; The MITRE Corporation, McLean, VA; Logicon Eagle Technology, Inc., Reston, VA and Winter Park, FL.

\* This project is not a new start. It combines Projects T63 and T65 above.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET	T ITEM JUS	STIFIC	CATION	SHEET (	(R-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCLA Joint/Defense Information Sy	OMENCLA Information Sys	TURE	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K	on/0302019K	
COST (in millions)	FY95		FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
CINC/JTF C4 Integration/T66	0	0		1.679	1.698	1.833	1.947	2.078	Contg	Contg
B. Program Change Summary			#30KE	NOVE		500				
Previous President's Budget (FY 1996)			122	1 200		0				
Appropriated value Adjustments to Appropriated Value Adjustments to Budget Year Since FY96 President's Budget Current Budget Submit/President's Budget	's Budget				+ ```	+1.679				
Change Summary Explanation: Funding: *Beginning FY 1997, -Projects T63 and T65 are combined	ınd T65 are combir		into this new project.	ect.						
C. Other Program Funding Summary										
	<u>FY95</u>	FY96	FY97	Total Cost	Cost					
Operation and Maintenance:		-	.025	Contg	<b>PO</b>					
Related RDT&E: Other projects in PE #0302019K.										
D. Schedule Profile									,	
FY97 1st quarter: Place tasks on contract.  2nd quarter: Contract Award Joint Integrated Tactical Switch (JITS).  3rd quarter: Delivery of FY97 C4 Systems Master Plan.  4th quarter: JITS Limited Production Fielding.  4th quarter: Operational Test and Evaluation/Users Test for JITS.  4th quarter: JITS Asynchronous Transfer Mode (ATM) Preplanned Product Improvements (P3I) integration testing and evaluation.	ated Tactical Switcns Master Plan. elding. ation/Users Test for Mode (ATM) Prest Mode (ATM)	ch (JITS). r JITS. eplanned	Product Imp	orovements (P3	I) integration test	ing and evaluat	ion.			
				Page 24 of 25						

	RDT	&E PROC	FRAM EL	EMENTA	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	COST BE	EAKD0	WN (R-3)		DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	TON/BUD se Wide/07	GET ACTI	VITY				R-11 Joint/I CINC	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Er CINC/JTF C4 Integration (T66)	LATURE Systems Engineerin T66)	R-1 ITEM NOMENCLATURE Joint/Defense Information Systems Engineering and Integration/0302019K/ CINC/JTF C4 Integration (T66)	019K/
A. Project Cost B	Cost Breakdown					EVOS		EVOC	7.1	202	
Project Cost Categories	gories							3		7613	
a. Systems Engineering	Ingineering					0		0	1,6	1,679	
Total						0		0	1,6	1,679	
B. Budget Acquisition History and Support and Management Organizations	sition History	Acquisition History and Planning Information Management Organizations	Information								
Contractor or Co Government Me Performing or Activity Ve	Contract Method/Type or Funding	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Prior to EY95		Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total <u>Program</u>
Multiple SS/C Performing CPA Activities CPF MIP	SS/C CPAF CPFF MIPR WR						0	0	1,679	Contg	Contg
Government Furnished Property: N/A	ished Proper	ty: N/A									
Total Project:							0	0	1,679		
						Page 25 of 25	f25				

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION	I ITEM JUST	IFICATION SHEET (R-2 Ex	V SHEET (	(R-2 Exhibit)	t)		DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	URE			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Total Program Element (PE) Cost: PE0303126K	27.166	20.060	23.361	8.352	8.499	8.796	9.107	Contg	Contg
Project E25 Commercial Satellite Communications Initiatives Follow-On	10.000	7.263	7.636	0	0	0	0	0	44.899
Project E26 Leading Edge Pilot Information Technology	*0	2.873	3.029	3.139	3.260	3.404	3.527	Contg	Contg
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	•0	4.113	4.671	4.749	4.780	4.919	5.092	Contg	Contg
Project U16 Secure Video Teleconferencing System	0.717	0.646	0	0	0	0	0	0	2.645
Project U20 Defense Information System Network (DISN)	5.922	0	0	0	0	0	0	0	14.831
Project H20 Defense Information System Network (DISN) Acquisition	1.380	2.131	7.558	0	0	0	0	0	13.307
Project U30 Integrated System/Network Management	2.672	0	0	0	0	0	0	0	5.695
Project U40 Defense Satellite Comm System (DSCS) Satellite Comm (SATCOM)	2.346	0	0	0	0	0	0	0	6.303
Project U50 Defense Switched Network (DSN)	0.815	0	0	0	0	0	0	0	1.798
			Page 1 of 30						

RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 FFM NOMENCLA PE 0303126K/Long Haul		TURE Communication	SI		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H80 Defense Message System (DMS)	2.904	2.589	*	*	*	*	*	Contg	Contg
Project W90 White House Situation Support Staff	0.410	0.445	0.467	0.464	0.459	0.473	0.488	Contg	Contg

funds system engineering, test and evaluation for the Defense Communications System (DCS)/Defense Information Systems Network (DISN) which provides Defense-wide communications for the day-to-day operations of the DOD and serves as the core of DOD wartime communications for the National Command Authorities (NCA), the Joint Chiefs of Staff (JCS), the Commanders in Chief (CINC's), and other critical users. This PE provides for the engineering to consolidate the operational communications networks into DISN and for the technologies, commercial equipments and service offerings to reduce the cost of the DCS/DISN and to provide valuable new information services to users. Mission Description and Budget Item Justification: This program element 5

in FY94 by transferring those portions of projects U20 and U30 which cover DISN service contracts. This work is not a new start. Project U30 supports the design and development of an efficient, cost their insertion into Defense Information Infrastructure (DII). Project H80 supports the development of DMS which is designed to provide the defense community a more interoperable and cost effective extension of DISN to deployed tactical elements. Project U50 supports network and system engineering for the DSN and the assessment, testing and network engineering of emerging technologies for integrated, efficient and affordable network to provide the full spectrum of communications and information transfer requirements for the future of DOD. Project H20, DISN Acquisition, was formed The PE consists of 11 projects. Project E25 develops and implements a commercial satellite communications systems pilot program in support of the DSCS/DISN. Project E26 supports Leading Edge Pilot Services which include information for worldwide DOD user and research communities. This project is not a new start but an evolving functional realignment within current areas. Project effective, survivable, fully integrated, worldwide system/network management capability supporting the global grid concept, based on emerging newly developed DOD standards and incorporating the E61 supports the planning and decision management to provide responsive communications and information services to support evolving military missions. Project U16 supports the development of NCA and Executive agencies. Project U20 supports design and development of DISN, an interoperable, flexible, messaging service. Project W90 supports engineering to provide full level crisis management capabilities for the White House. This program element is under Budget Activity 07 because it involves latest technology. Project U40 includes the enhancement/integration of DSCS and tactical satellite resources into DISN and use of commercial SATCOM to provide unique capabilities required for SVTS, a highly secure video teleconferencing crisis management system used by the efforts supporting operational systems development.

\* Neither project E26 nor project E61 are new starts. They reflect a functional realignment and a transfer of effort from PE0302019K.

\*\* Project H80 has been transferred to PE 0303129K beginning in FY 1997.

RDT&E B	UDGET ITE	M JUSTIF	ICATION SI	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	(xhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM N PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	URE mmunications			
COST (in millions)	,	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E25 Commercial Satellite Communications Initiatives Follow-On		10.000	7.263	7.636	0	0	0	0	0	44.899

A. Mission Description & Budget Item Justification:

seed pilot network, a tool for networking planning, development of a bandwidth management capability for leased whole transponders, and validation of a concept to reduce DOD (U) This project develops and implements pilot capabilities for a proof of concept using available commercial satellite communications capabilities. This program establishes a commercial satellite telecommunications costs by bundling of individual circuit leases and by consolidating telecommunications requirements on whole transponders. The pilot network will offer a variety of services that are presently not available, such as downloading high data rate information from airborne vehicles via commercial satellites to processing centers, and dissemination of information to remote users. This program will demonstrate how to integrate commercial satellite capabilities with the Defense Information System Network (DISN) and Defense Satellite Communications System (DSCS)

### (U) FY 1995 Accomplishments;

- o Piloted Network Initial Operational Capability
- Started bandwidth mgmt services, extend coverage to Pacifc area, established airborne vehicle services
  - o Continued contracts for transponder and bandwidth mgmt center (\$10M)
    - o Established gateway teleport to support DISN

\$10.000M Total

### (U) FY1996 Plans:

- o Continue contracts and extend services to new regions (\$7.263M)
  - o Validate new contracts
- o Expand pilot network services (Ongoing)
- Serve telemedicine, metorological and ships at sea applications
  - o Support Bosnia Peace Keeping

\$7.263M Total

### (U) FY 1997 Plans:

- o Expand pilot services (\$7.636M Ongoing)
  - o Validate concepts (4Q97)
- sustainable customer base established, integration with DSCS and DISN, final reports and business plan

\$7.636M Total

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RDT&E BUDGET ITEM JUSTIFICATION SHEET	TEM JUST	FICATIO		(R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENCLA PE 0303126K/Long Haul		TURE Communications	SU		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E25 Commercial Satellite Communications Initiatives Follow-On	10.000	7.263	7.636	0	0	0	0	0	44.899
Acquisition Strategy: All services and equipment are to be competitively procured.	to be competitive	rely procured.							
B. Program Change Summary						TOTAL		,	
Previous President's Budget (FY 1996)	FY95		FY96 8.000		FY97 8 000	COST 46 000			
Appropriated Value Adjustments to Appropriated Value	10.000		8.000						
Adjustments to Budget Year Since FY 1996 President's Budget	ident's Budget				364				
Current Budget Submit/President's Budget Change Summary Explanation:	10.000		7.263		7.636	44.899			
Funding:: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. FY97 reduction due to revised inflation rates.	djustment to De	fense-wide In	vestment Appro	priation.					
Schedule: N/A Technical: N/A		£							
C. Other Program Funding Summary: N/A									
		Pag	Page 4 of 30		÷				

RDT&E BUDGET ITEM JUSTIFICATION SHEET	GET ITE	M JUSTIF	ICATION		(R-2 Exhibit)			DATE: March 1996	Aarch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM N PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	URE mmunications			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E25 Commercial Satellite Communications Initiatives Follow-On		10.000	7.263	7.636	0	0	0	0	0	44.899
D. Schedule Profile: Fiscal Year actual and planned events by quarter.  FY  Acquisition Milestones:  Award tri band terminal contracts	<u>Y 1995</u> 2 3 4	FY 1996	FY 1997	<u>7</u> 4						
Engineering Milestones: Award VSAT Terminal Award transponder and bandwidth contract T&E milestones: Validated Bmc/Control	×	×								
			Page 5 of 30	of 30						-

RDT&E PROGRAM ELEMENT/PROJECT COS	CT COST BREAKDOWN (R-3)		DATE: March 1996
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E25/ COMMERCIAL SATELLITE COMMUNICAT	ICLATURE  ul Communications/E  LLITE COMMUNIC	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E25/ COMMERCIAL SATELLITE COMMUNICATIONS INITIATIVES FOLLOW-ON
A. Project Cost Breakdown (\$000)			
Project cost categories FY95	FY96	FY97	
<ol> <li>1. Travel</li> <li>2. Management Support Services</li> <li>3. Engineering &amp; Technical Services</li> <li>9,575</li> </ol>	25 300 6,938	25 300 7,311	
Total 10,000	7,263	7,636	
B. Budget Acquisition History and Planning Information: N/A			
Page 6 of 30	30		

RDT&	E BUDGET	ITEM JUSTI	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	HEET (R-2	Exhibit)			DATE: March 1996	rch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	тту				R-1 ITEM P PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE communication	SU		
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E26 Leading Edge Pilot Information Technology		0	2.873	3.029	3.139	3.260	3.404	3.527	Contg	Contg

DISA funding under this program element will allow the AITS-JPO to leverage research and development funding and efforts. This project has been moved from PE0302019K to effectively as is possible) to customers with operational needs that exceed those capabilities currently available from the DII Utility. The resulting services will be managed in the experimental uses, to leading edge utility and from leading edge utility to maximize the potential for migration into the DII and the National Information Infrastructure (NII). The maintained by DISA. The DISA/ARPA Advanced Information Technology Services Joint Program Leading Edge Pilot Services are information transport and value added services which are not available from the Defense Information Infrastructure (DII) Utility, and for which Office (AITS-JPO) will integrate advanced technology research and development efforts from ARPA and others, focus the flow of these technologies from R&D to widespread customers are willing to assume some of the risk associated with development of initial deployment. These services may include information processing, storage, and retrieval; communications (voice, data, video, multimedia); and security technologies and applications in command, control, and intelligence for the worldwide DOD user and research communities. This program supports the acquisition and delivery of consolidated advanced technology information services in a maximally competitive environment (as cost Mission Description & Budget Item Justification: (U) This project is not a new start but an evolving functional realignment and represents a breakout from Project E61 this PE starting in FY96. FY95 accomplishments and plans are described in PE0302019K. FY96 and beyond efforts are reported here. operational context of the single information utility (DII Utility) operated and (U) FY 1995 Plans: Described in PE0302019K, Project E61.

## (U) FY 1996 Plans:

- are still research and development for potential integration into the AITS-JPO Pilot Service portfolio. o Monitor candidate information system technologies and capabilities which (\$100K) (Continuing)
- o Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge technology services. (\$100K) (Continuing) o Evaluate available candidate Advanced Information Technology (AIT) services versus user requirements and select promising technologies for pilot service. (\$584K) (Continuing)
- o Develop and coordinate plans and strategies for migration of Leading Edge Services into the DII utility. (\$1,431K) (Continuing)
  - lo Migrate video teleconferencing services to the DII utility. (\$150K) (Continuing)
- Evaluate and integrate first production key agile security devices for the modeling and simulation and high performance computing users. (\$208K) (Continuing)
  - Integrate Asynchronous Transfer Mode (ATM) multicast services for the modeling and simulation users. (\$300K)(4Qtr)
    - \$2.873M Total

RDT&E BUDGET ITEM JUST	UDGETI	EM JUSTI	IFICATION SHEET		(R-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 ITEM N PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	<b>FURE</b> nmunications			
COST (in millions)		FY95	96A-J	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E26 Leading Edge Pilot Information Technology		0	2.873	3.029	3.139	3.260	3.404	3.527	Contg	Contg
(U) EY 1997 Plans:  Monitor candidate information system technologies and capabilities which are still in research and development for potential integration into the AITS-JPO Pilot Service portfolio (\$1000X)4(Qtr)  Participate, initiate, expedite, or collaborate in Advanced Concepts Technology Demonstrations (ACTD's) in support of leading edge technology services. (\$100X)(4(Qtr)  Evaluate available candidate AIT services versus user requirements and select promising technologies for pilot service (\$950X)(4(Qtr)  Convelop and coordinate plans and strategies for migration of Leading Edge Services into the DII utility. (\$1,050X)(4(Qtr)  Migrate selected modeling and simulation services to the DII core utility. (\$450X)(4(Qtr)  Stroggalistical Strategies for migration of Leading Edge Services into the DII utility. (\$1,050X)(4(Qtr)  Stroggalistical Strategies for migration of Leading Edge Services into the DII utility. (\$1,050X)(4(Qtr)  Stroggalistical Strategies for migration of Leading Edge Services into the DII core utility. (\$450X)(4(Qtr)  Stroggalistical Strategies for migration of the DII core utility. (\$450X)(4(Qtr)  Stroggalistical Strategies for migration and the DII core utility. (\$450X)(4(Qtr)  Stroggalistical Strategies for migration and the Strategies for migration and the Strategies for migrategies of the Differson of the Differson of the DII core utility. (\$450X)(4(Qtr)  Stroggalistical Value  Adjustments to Appropriated Value  Adjustments Budget Versident's Budget  Current Budget Versident's Budget  Professional adjustment to Defense-wide Investment Appropriation.  Funding: FV95 reduction due to revised inflation rates.  Schedule: NAS	technologies oorate in Advarices to mightion services to ad secured to end securement statemement statement statement statement inflation rates.	and capabilities wanted Concepts Terration of Leading tration of Leading to the DII core utility pilot services of work and tants of work and to the DII core utility pilot services.   EY95  O  O  O  Dudget  O  O  O  Defense-wid	which are sting Edge Servitility. (\$450K) es. (\$3779K)(4) es. (\$3779K)(4) es. (\$5.	Il in research au ornising technoces into the DII (4Qtr)  Support FFRL 2.971 2.971 2.971 2.873 3.873	and developmen s (ACTD's) in sologies for pilot I utility. (\$1,05)	t for potential is service (\$950 OK)(4Qtr)  Contracts.  EY97 3.129 3.029	integration int mg edge techn K)(4Qtr)	integration into the AITS-JPC ling edge technology services. JK)(4Qtr)	O Pilot Service p. (\$100K)(4Qtr)	æ portfolio (tr.)
Technical: N/A										

Total Cost Contg

FY97 3.102

FY96 0 Page 8 of 30

FY95 0

C. Other Program Funding Summary:

O&M

RDT&E BUDGET ITEM JUSTIFICA	GET ITEN	A JUSTIF	FICATION SHEET	SHEET (R	TION SHEET (R-2 Exhibit)			DATE: March 1996	th 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCLA PE 0303126K/Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	<b>LTURE</b> Communications			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E26 Leading Edge Pilot Information Technology		0	2.873	3.029	3.139	3.260	3.404	3.527	Contg	Contg
D. Schedule Profile Fiscal Year actual and planned events by quarter.										
		EY95 2 3 4	-	FY96 2 3 4	EY97 1 2 3	4				
SOW for SETA Support		N/A	×	×	×					
			Ь	Page 9 of 30						

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKI	COST BREAKDOWN (R-3)	DATE: March 1996
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLAT PE 0303126K/Long Haul Com	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/E26 Leading Edge Pilot Info Tech
A. Project Cost Breakdown FY95	<u>FY96</u>	FY97
Project Cost Categories		
Modeling & Simulation 0	2,873	3,029
Total	2,873	3,029
B. Budget Acquisition History and Planning Information: N/A		
	•	
Page 10 of 30	.30	

R-1 Shopping List UNCLASSIFIED

RDT&	E BUDGET	RDT&E BUDGET ITEM JUSTI	FICATION SHEET (R-2 Exhibit)	HEET (R-2	Exhibit)			DATE: March 1996	rch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	/ITY				R-1 ITEM P PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE Communication	SU		
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning		*0	4.113	4.671	4.749	4.780	4.919	5.092	Contg	Contg

described in PE0302019K. The rapid evolution of the global military environment is driving a major evolution of the DOD force structure and military operations requiring greater Decision Support Center (JCDSC) is developed and upgraded for the Joint Staff as the single DOD source of validated requirements. This work is essential to achieve the DISA A. Mission Description & Budget Item Justification: (U) \*This project has been moved from PE0302019K to this PE starting in FY96. FY95 accomplishments and plans are flexibility to meet the global warfighting requirements to rapidly project forces anywhere in the world. This project supports the planning and decision management required to planning and decision management for the Defense Information Infrastructure (DII). The SATCOM investment strategy and acquisition roadmap provide guidance to the DOD Services, and Defense Agencies for the acquisition and upgrade of MILSATCOM systems and the cost effective acquisition of commercial SATCOM services. The Joint C4I investment strategy including all Military Satellite Communications (MILSATCOM) systems and commercial SATCOM capabilities, and the integrated communications and provide responsive communications and information services to support the evolving military missions. The efforts support integrated DOD communications planning and decision management process. goal of quality information services at an affordable cost through a deliberate

- (U) FY95 Plans: Described in PE0302019K, Project E61.
  - (U) FY96 Plans:
- o JCDSC: Continue upgrading the JCDSC, developing advanced planning tools and databases. (\$690K) (Continuing)
- (Continuing) C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$950K)
- C4I/DII Assessment: Provide C4I assessment support to the JWC, and C4I/DII assessment support to DISA and the operational community. (\$709K) (Continuing)
  - Joint Staff Support: Provide analysis and decision management support to the JS and warfighters in the realization of C4IFTW. (\$519K) (Continuing)
- Integrated Network Assessments: Assess military and commercial telecommunications alternatives to resolve programmatic issues. (\$866K) (Continuing)
  - training and operational exercises. (\$379K) (Continuing) C4I Model: Develop A DOD-wide C4I simulator to support mission test, \$4.113M Total
- (U) FY97 Plans:
- o JCDSC: Continue upgrading the JCDSC, developing advanced planning tools and databases. (\$838K) (Continuing)
- (Continuing) C4I Simulation Integration: Migrate to a common family of models for training, planning and assessment. (\$800K)

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RDT&E BUDGET ITEM JUST	ITEM JUSTI	FICATION SHEET		(R-2 Exhibit)			DATE: Mar	March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N PE 0303126K/	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	<b>FURE</b> nmunications			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	<b>*</b> 0	4.113	4.671	4.749	4.780	4.919	5.092	Contg	Contg
o C4I/DII Assessment: Provide C4I assessment support to the JWC, and C4I/DII assessment support to DISA and the operational community. o Joint Staff Support: Provide analysis and decision management support to the JS and warfighters in the realization of C4IFTW. (\$600K) (Cc) o Integrated Network Assessments: Assess military and commercial telecommunications alternatives to resolve programmatic issues. (\$1,050) o C4I Model: Develop a DOD-wide C4I simulator to support mission test, training and operational exercises. (\$420K) (Continuing) \$4.671M Total	pport to the JWC, n management sup y and commercial to support missio	and C4I/DII a port to the JS telecommunic n test, training	ssessment supand and warfighter ations alternations and operation	and C4I/DII assessment support to DISA and the operation operation of C4IFT telecommunications alternatives to resolve programmatic on test, training and operational exercises. (\$420K) (Contact test, training and operational exercises.	and the operational coration of C4IFTW. (\$6 programmatic issues. (\$420K) (Continuing)	con (\$6( les. ing)	(\$963K) intinuing) K) (Contir	(Continuing) nuing)	
Acquisition Strategy: SETA support contract (CPFF-LOE) was competitively awarded in (Q3) and consists of a base year and four option years. the sponsoring Service (e.g., the Army for MITRE).	E) was competitive for MITRE).	ly awarded in (	Q3) and consists	of a base year an	d four option ye		FFRDC support is procured sole source through	ed sole source tl	hrough
B. Program Change Summary  Drevious President's Budget (FV 1996)	EX95	<u>8</u>	EY96 4.279	, ol o	FY97 4.383				
Appropriated Value Adjustments to Appropriated Value		0 0	4.279	6.16					
Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation:	t's Budget 0		4.113	<b>~</b>	.288				
Funding: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation.  FY97 reduction due to revised fiscal guidance.  Schedule: N/A  Technical: N/A	al adjustment to Def I guidance.	ense-wide Inve	stment Appropri	ation.	•				
* In the previous President's Budget, funding for this project was in PE0302019K.	oject was in PE0302	.019К.							
C. Other Program Funding Summary O&M	FY95	<b>\S</b>	FY96 1.060	FY97 1.655	Total C Contg	Cost			
			Page 12 of 30						

RDT&E BUDGET ITEM JUSTI	ET ITEM JUSTI	FICATION SHEET	SHEET (R	(R-2 Exhibit)			DATE: Marc	March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NO PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	URE ommunications			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project E61 MILSATCOM and Defense Information Infrastructure (DII) Planning	0	4.113	4.671	4.749	4.780	4.919	260'5	Contg	Contg
D. Schedule Profile Fiscal Year actual and planned events by quarter.								,	
	1 2 3	. 1 2	EY96 2 3 4	1 2 3	4				
Execute second option year of SETA support contract Execute FFRDC support (MIPRs) Execute third option year of SETA support contract Execute FFRDC support (MIPRs)			× ×	×					
		II	Page 13 of 30						

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	ECT COST BREA	REAKDOWN (R-3)	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCLAT PE 0303126K/ Long Haul Con	R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications/E61/MILSATCOM	
A. Project Cost Breakdown (\$000)	FY95	FY96	FY97	
Project Cost Categories				
Modeling & Simulation	0	4,113	4,671	
Total	0	4,113	4,671	
B. Budget Acquisition History and Planning Information: N/A				
		•		
	Page 14 of 30			
	1 age 14 of 30			

RDT&	E BUDGET	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION S	HEET (R-2	Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	/III/				R-1 ITEM NOMENCLA PE 0303126K/Long Haul (		TURE Communications	18		
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of	Total Cost
Project U16 Secure Video Teleconferencing System		0.717	0.646	0	0	0	0	0	Complete 0	2.645

A. Mission Description & Budget Item Justification: (U) This project, tasked by Presidential Directive NSDD-304, provides a cost effective, secure, reliable teleconferencing system that is responsive to the urgent operational requirements of the Executive Departments which are involved in the development and implementation of national security policy. This system is designed to emulate face-toface conferences at the top executive levels for the conduct of highly sensitive business.

## (U) FY 1995 Plans:

- o Begin detailed engineering design, development and prototyping of the hub switch and associated node processors, based on high-level design completed in FY94. (\$486K) (4Qtr) o Perform high-level systems engineering design which will facilitate transition from the Washington Area Wideband System (WAWS) transmission system to a state-of-the-art system.
  - \$.717M Total

## (U) FY 1996 Plans:

- o Continue detailed engineering design, development, and prototyping of the hub switch and associated node processors which was begun in FY95. (\$251K) (4Qtr)
  - o Perform detailed systems engineering design of alternative transmission system for the network, to include utilization of extra bandwidth. (\$220K) (4Qtr)
- o Perform high-level systems engineering design of expanded secure inter-agency video network, including integration with appropriate external networks. (\$175K) (4Qtr)

4 option years)

Acquisition Strategy: Harris Corporation (competitive award in with 1 base year and

(U) FY 1997 Plans: This project has transitioned to O&M appropriation.

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RDT&E BUDGET ITEM JUSTIFICATI	GET ITE	M JUSTI	IFICATION	N SHEET	(R-2 Exhibit)	hibit)			DATE: March 1996		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ΓY				R-1 IT PE 0303	R-1 ITEM NOMENCLA PE 0303126K/Long Haul Co	ENCLAT Haul Com	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications			
COST (in millions)		FY95	FY96	FY97	FY98		FY99	FY00	FY01	Cost of Complete	Total Cost
Project U16 Secure Video Teleconferencing System		0.717	0.646	0	0		0	0	0	0	2.645
B. Program Change Summary:			五	FY1995	FY1996	<b>%</b>	EY1997	7			
Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget	sident's Budget		•	717. 717.	.711 .711 .065	<b>~</b> _ 10 _ 10	.721				
Change Summary Explanation: Funding:: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation. FY97: Project transitioned to O&M appropriation. Schedule: N/A Technical: N/A	al adjustment to appropriation.	Defense-wide	Investment A	ppropriation.							
C. Other Program Funding Summary:	FY95	FY96	FY97	FY98	FY99	FY00	FY01	To Compl	Total Cost		
Procurement Line P-1 O&M	.900	0	3.234	.241 1.828	.271 2.242	.282 2.279	.293 2.520	Continuing Continuing	Continuing Continuing		
D. Schedule Profile: Fiscal Year actual and planned events by quarter.	<u>FY95</u>	•	•	FY96	•	•	FY97				
Contract Milestones Contract DCA100-93-C-0146 Contract Awarded (basic year) 4 Options Years	7	4	<b>-</b> ×	7	4	<b></b> ·	7	ω 4			
				Page 16 of 30	30		•				

RDT&E BUDGET ITEM JUSTIFICATION SHEET	GET ITER		FICATION SHEET (R-2 Exhi	12	bit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NO PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	URE ommunications			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project U16 Secure Video Teleconferencing System		0.717	0.646	0	0	0	0	0	0	2.645
Other Program Events  Engr. Design of new Hub Switch High Level Design of New Transmission System Prototype new Hub Switch High Level Design of Expanded Network		EY95 3 4 X X X X		EY96 X X X X X 17.6f.30	1 2	3 4 4				
				1 ago 11 01 30						

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	ROJECT COST BREAKDOWN (R-3)	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/U16/SVTS	tions/U16/ SVTS	
A. Project Cost Breakdown (\$000)			
Project Cost Categories	FY96	<u>FY97</u>	
a. Engineering and Technical Services	646	0	
Total	646	0	
B. Budget Acquisition History and Planning Information; N/A			

RDT&E BUD	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	rch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y.			R-1 ITEM N PE 0303126F	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Commu	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	Su		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	1.380	2.131	7.558	0	0	0	0	0	13.307

national defense C4I decision support requirements, Corporate Information Management (CIM) functional businesses, and U.S. efforts to maintain the world-wide lead in defensive information warfare. DISN will provide the Warfighters with U.S. Government controlled, secure; switched voice and data; imagery, video teleconferencing; and dedicated point-to-point connectivity. It directly supports Mission Description & Budget Item Justification: DISN provides the Warfighting Commanders in Chief (CINCs), Joint Task Force (JTF) Commanders and Combined Task This infrastructure is the only subset of the Defense Information Infrastructure (DII) primarily providing transport. This project supports the acquisition of the DISN Services for CONUS, Hawaii Information Transfer System (HITS), Deployable, Pacific and Europe. Force (CTF) Commanders with a robust C4I information transfer infrastructure.

# (U) FY 1995 Accomplishments

- (\$672K) (Completed) support. o Provide engineering support for the development of the DISN CONUS acquisition
  - o Assess user requirements and provide engineering support for HITS. (\$689K) (Completed)
- (\$19K) (Completed) Provide engineering support in the development of the DISA Network/System Management requirements.
  - \$1.380M Total

## (U) FY 1996 Plans:

- Provide acquisition technical support to CONUS (\$272K) (Continuing)
- o Provide Personal Communications Systems (PCS) support (\$172K) (Continuing)
- Perform ITSDN Testing to Deployed (\$208K) (Continuing)

0

- Develop Systems Design OCONUS (Pacific & Europe) (\$479K) (Continuing)
- o Work with NSA/CONDOR for MSS security architecture (\$1,000K) (2nd Qtr)
  - \$2.131M Total

## (U) FY 1997 Plans:

- o Acquire initial number of Handsets, Security Sleeves & FORTEZZA Cards (\$2,907K)(Continuing)
- Demonstrate the capability to support a Joint Task Force deployed anywhere in the world with high bandwidth communications over commercial transoceanic fiber optics cables (\$4,651K). (Continuing)
- ooConduct an Advanced concept Technology Demonstration to expand fiber optics links from existing commercial cable heads to newly established cable heads within several days on a shoreline where the JTF would be deployed.
- ooDevelop strategy to include DOD bandwidth surge capabilities in future commercial transoceanic cable laying projects.
- ooDevelop Concept of Operations for expanding tranoceanic fiber based communication infrastructure inland where a high bandwidth infrastructure does not exist. ooDefine technology requirements to rapidly deploy a fiber based global grid for industry to include in future R&D programs.
- \$7.558M Total

RDT&E BUDGET ITEM JUST	T ITEM	JUSTIR	STIFICATION S	HEET	(R-2 Exhibit)			DATE: Mar	March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCLA PE 0303126K/Long Haul Co		TURE mmunications			
COST (in millions)	Ŧ	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition	-	1.380	2.131	7.558	0	0	0	0	0	13.307
Acquisition Strategy. FY95: FFRDC Support (MITRE), AT&T contract 3rd option year of 4 options (competitive contract) FY96: FFRDC Support (MITRE), JITC Support FY96: FFRDC Support (MITRE), JITC Support	d option year	of 4 option	s (competitive	contract)						
B. Program Change Summary			EVOC	2005	5	707	Total Cont			
Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation:	lent's Budget		FY95 1.843 1.843 463 1.380	EY96 1.244 1.244 .887 2.131	7.558 7.558	FY97 0 .558 .558	Total Cost 6.212 13.307			
Funding: FY95 and FY96 adjustments due to below threshold reprogrammings.  FY97 change due to program adjustment.	ow threshold nt.	reprogram	mings.							
Schedule: N/A										
Technical: N/A										
C. Other Program Funding Summary			FY95	FY96		FY97	Total Cost			
DBOF			\$7,661 \$367,000	\$4,930 \$369,000	\$8,734	734	Contg Contg			
				000000		ţ				
				rage 20 of 30						

RDT&E BU	BUDGET IT	ITEM JUSTIF	FICATION SHEET		(R-2 Exhibit)			DATE: Mar	March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCL PE 0303126K/Long Hau	<b>4</b> 5	'URE ommunications			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H20 Defense Information System Network (DISN) Acquisition		1.380	2.131	7.558	0	0	0	0	0	13.307
D. Schedule Profile										
(U) FY 1995 MITRE Award SRI Award AT&T Option Award Northern Telecomm Award	1st Otr 1st Otr 1st Otr 3rd Otr									
(U) FY 1996 MITRE Award JITC Award NSA/CONDOR Award Global Fiber/TAC Interface Contract Awd	1st Otr 1st Otr 2nd Otr TBD									
(U) FY 1997 NSA/CONDOR Award Global Fiber/TAC Interface Contract Awd	TBD		-							
			Ъ	Page 21 of 30						

RDT&E PROGRA	PROGRAM	RDT&E PROGRAM ELEMENT/PROJECT	OJECT	COST BREAKDOWN (R-3)	REAK	DOW	BREAKDOWN (R-3)	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ACTIVITY				<b>A C</b>	E 030312	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications/H20 DISN Acquisition	ons/H20 DISN Acquisition	
A. Project Cost Breakdown (\$000)				FV05			FV96	FV97	
Engineering and Technical Services				1,380			2,131	7,558	
Total				1,380			2,131	7,558	
B. Budget Acquisition History and Planning Information:	Planning Informatic	N/A							
Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Total Prior To	Budget FY95	Budget FY96	Budget To Evaplete	t To Total	
Product Development Organizations MITRE MIPR	s 01 Oct 94	2284	2284	•	1361	923	0	2284	
All other contract MIPR/PR or Contract Mods	01 Oct 94 ods	11023	11023	2238	19	1208	1558 0	11023	
,	Subtotal Contracts	ıtracts		2238	1380	2131	7558	13307	
In House Engineering & Technical Support	Support								
	Subtotal In-House	onse							
TOTAL MANAGEMENT AND SUPPORT	JPPORT								
				Page 22 of 30	of 30				

R-1 Shopping List UNCLASSIFIED

RDT&E BUD	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	<b>FIFICATION</b>	SHEET (	R-2 Exhibit			DALE: INIBICII 1990	ICII 1330	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	LX.			R-1 ITEM P PE 0303126	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE Communication	Su		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H80 Defense Message System (DMS)	2.904	2.589	*0	0	0	0	0	Contg	Contg

Mission Description & Budget Item Justification. The purpose of this project is to provide system engineering to ensure that the Joint Staff (JS) and OSD (C3I) validated messaging requirements components/services; technology insertion and service demonstrations; and influencing industry to include DMS features as part of their standard product offerings. \* This project is funded in messaging/directory service than that which is in place today. Current support is focused on developing secure messaging/directory/management services through requirements definition and refinement; target component Developmental, Initial and Final Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing transitional interoperability requirements and are satisfied through the use of a COTS-based, multi-level secure messaging and directory service. The DMS provides the defense community with a more interoperable, cost effective PE0303129K beginning in FY1997.

# (U) FY 1995 Accomplishments:

- o Performed engineering in support of the DMS-GOSIP acquisition to include messaging, directory, and service management services. (\$90K) (4 Qtr)
  - (\$300K) (Continuing) the DMS network. o Supported topology design/development, network sizing, planning, and phasing for
- o Performed transition planning for both the unclassified but sensitive and classified DMS, including tactical users, special DMS components (e.g. MFI), and integration with MISSI. (\$1134K) (Cont.)
  - o Evolved Proof-of-Concept (POC) network and DMS testbeds into Technology Insertion laboratory and demonstration capability. (\$380K) (Continuing)
- o Supported DMS Test and Evaluation (T&E) effort including development of test criteria, review of test plans/procedures, and observation and analysis of POC test results. (\$350K) (4 Qtr) o Developed and promoted DOD/DMS requirements and positions on data communications protocol issues surfacing via military and civilian, national and international standards fora.

#### \$2.904M Total

## (U) FY 1996 Plans:

execution. (\$225K) (Cont.)

- o Redsign DMS Target Architecture and Implementation Strategy (TAIS) to reflect changes in security products/solutions, additional definition of JTF and tactical user/environment, and program o Support DMS Test and Evaluation (T & E) efforts including finalization of Compliancy Definition, Site Acceptance Recommendations, and observation, analysis/evaluation of IOT&E test milestones. Work with DMS vendor to finalize initial topology, design, network sizing, planning, and phasing for the networks, including DISN transport. (\$716K) (Cont.)
- o Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and civilian, national and international standards fora. Feeds into this effort include participation in JWID, EC/EDI, and other integration/demonstration efforts. (\$1108K) (Cont.)
  - o Develop user registration strategy/plan, finalize management staffing analysis for LCC, refinement of management concepts via management capability prototyping. (\$540K) (Cont.) \$2.589M Total

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RDT&E BUDGE	BUDGET ITEM JUSTIFICATION SHEET	TIFICATIO		(R-2 Exhibit)			DATE: March 1996	arch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	<b>TTURE</b> mmunications			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H80 Defense Message System	2.904	2.589	0	0	0	0	0	Contg	Contg
(U) FY 1997 Plans; This project has been transferred to PE 0303129K.									
B. Program Change Summary		EY95		FY96		FY97			
Previous President's Budget (FY 1996) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget	dent's Budget	2.904 2.904		2.850 2.850 261 2.589		2.653			
Funding: FY96 reduction due to Congressional adjustment to Defense-FY97 funding is in PE 0303129K.	djustment to Defens	e-wide Investmen	wide Investment Appropriation.						
Schedule: N/A Technical: N/A									
			Page 24 of 30						

Project H801 Defense Wideler)	RDT&E BUDGET ITEM JUSTI	TEM JUSTIF	FICATION SHEET		(R-2 Exhibit)			DATE: Mar	March 1996	(
Property   Property	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N PE 0303126k	OMENCLAT	URE mmunications			
Defense Message System   2.904   2.289   9   0   0   0   0   0   0   0   0	COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
FY95   EY96   EY97   EY97		2.904	2,589	0	0	0	0	0	Contg	Contg
FY93   EY94   EY97										
(1 Qtr) (1 Qtr) (4 Qtr) (2 Qtr)  nd Topology Plans (4 Qtr)  nternal) (2 Qtr)  Qtr)  port (2 Qtr)/Test Plan (3 Qtr)  cture (classified) (3 Qtr)  reture (classified) (3 Qtr)  Profile (draft) (3 Qtr)	Procurement/PE 0303126K - Defense Message System O&M/PE 0303126K - Defense Message System		20.00 10.00	vl o o	EY96 0 0	EY97 0 0	100 20.0 14.0	al Cost 000 234		
(1 Qtr) (1 Qtr) (4 Qtr) (2 Qtr)  nd Topology Plans (4 Qtr)  nternal) (2 Qtr)  Qtr)  eport (2 Qtr)/Test Plan (3 Qtr)  cture (classified) (3 Qtr)  Profile (draft) (3 Qtr)										
(4 Qtr) (2 Qtr)  nd Topology Plans (4 Qtr)  nternal) (2 Qtr)  Qtr)  port (2 Qtr)/Test Plan (3 Qtr)  cture (classified) (3 Qtr)  Profile (draft) (3 Qtr)	(U) FY 1995 Acquisition Milestones Pre-IPR (DISA Internal) (1 Qtr) IPR-MAISRC (MS II) (1 Qtr)									
ntemal) (2 Qtr) Qtr) ); eport (2 Qtr)/Test Plan (3 Qtr) cture (classified) (3 Qtr) Profile (draft) (3 Qtr)	DMS Contract Award (4 Qtr)  Engineering Milestones  ACP 133 Framework (2 Qtr)  DMS Initial Fielding and Topology Plans (4 Qtr)  JWID '95 (4 Qtr)									
	nternal) (2 Qtr) Qtr) ); eport (2 Qtr)/Test Plan cture (classified) (3 Qtr) Profile (draft) (3 Qtr)									
			Pa	ge 25 of 30						

	RDT&EP	ROGRAM E	PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	OJECT	OST B	REAK	DOWN (R-	3)	DATE: March 1996	
APPROPRIATI RDT&E, Defense	PRIATION/BUDGET ACTIVITY Defense Wide/07	ACTIVITY					E-1 ITEM NON E 0303126K/ Lor	R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications/H80/DMS	ns/H80/DMS	
A. <u>Project Cost Breakdown</u> (\$000) Project Cost Categories	zakdown (\$000)					FY95		<u>FY96</u>	FY97	
a. Engineering and	a. Engineering and Technical Services Total	ø				2,904		2,589	0	
B. Budget Acquisit	tion History and Pl	Budget Acquisition History and Planning Information	_4							
Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation <u>Date</u>	Performing Activity EAC	Project Office EAC	Budget FY95	Budget EY96	Budget FY97	Budget To Complete	Total	
	ent Organizations MIPR and/or PR 15 Nov 94	'R 15 Nov 94	3697	3697	834	1022	•	3697	Continuing	1000
All other contracts Support and Manage	contracts  nd Management Organizations  MIPR	ons 01 Oct 94	13005	13005	330 1740	1567		13005	Continuing	The state of the s
All Other Contracts None.			•	>	•		<b>&gt;</b>	<b>-</b>		
In House Engineeri	Su Engineering & Technical Support	Subtotal Contracts apport	cts		2904	2589				14.905
		Subtotal In-House	<b>S</b> S							
TOTAL MANAGEMENT AND SUPPORT	MENT AND SUF	PORT								
				·						
					Page 26 of 30	of 30				

RDT&E BUI	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	rch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ΓΥ			R-1 ITEM NOMENCLA PE 0303126K/Long Haul		<b>TURE</b> Communications	ns		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project W90 White House Situation Support Staff	0.410	0.445	0.467	0.464	0.459	0.473	0.488	Contg	Contg

Mission Description & Budget Item Justification:

he President, Vice President, the National Security Advisor and his staff. This effort emphasizes information Information and Situation Management System (NSI & SMS) effort. This project ensures that full level crisis management capabilities are provided to the exchange and display and procedures. This project is part of the National Security

(U) FY 1995 Accomplishments: o Begin research and development into Decision Support Systems for the White House Situation Room. (\$410K) (Cont)

(U) FY 1996 Plans:

o Continue development of Decision Support Systems for the White House Situation Room. (\$445K) (Cont)

(U) FY 1997 Plans:

o Continue development of Decision Support Systems for the White House Situation Room. (\$467K) (Cont)

RDT&E BUDGET ITEM JUST	ET ITE	JUST	IFICATION SHEET		(R-2 Exhibit)			DATE: March 1996	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM N PE 0303126K	R-1 ITEM NOMENCLATURE PE 0303126K/Long Haul Communications	TURE mmunications			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project W90 White House Situation Support Staff (WHSSS)		.410	.445	.467	.464	.459	.473	.488	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996) Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Adjustments to Appropriated Value Current Budget Submit/President's Budget Change Summary Explanation:	ident's Bu	EY95 .410 .410 .410		FY96 .483 .483 .445		EY97 .482 .015				
Funding: FY96 reduction due to Congressional adjustment to Defense-wide Investment Appropriation.  FY97 reduction due to revised inflation rates.  Schedule: N/A	adjustmen n rates.	t to Defense-wi	de Investment	Appropriation.						
Technical: N/A  C. Other Program Funding Summary		FY95	-	FY96	FY97	To	<u>o</u>	Total Cost		
Procurement Line P-1		1.454		2.260	0	0		4.660		
O&M		2.260		2.806	4.653	Cont	ıtg	Contg		
						·				
				Page 28 of 30						

RDT&E BUDGET ITEM JUST			FICATION SHEET	SHEET (R	V SHEET (R-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM NOMENCLA PE 0303126K/ Long Haul	R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications	URE ommunications			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project W90 White House Situation Support Staff (WHSSS)		.410	.445	.467	.464	.459	.473	.488	Contg	Contg
D. Schedule Profile										
(U) FY 1995 Engineering Milestones: Begin research and development into Decision Support Systems for the White	upport Systems		House Situation Room.	Room. (2nd qtr FY95)	r FY95)					
(U) FY 1996 T&E Milestones: Continue development of Decision Support Systems for the White House Situation Room.	ems for the Wh	ite House Situ		(3rd qtr FY96)						
(U) FY 1997 Contract Milestones: Contract/Study to be delivered (3rd qtr FY97)										

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	AKDOWN (R-3)		DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE PE 0303126K/ Long Haul Communications/W90/WHSSS	CLATURE al Communications/WS	90/WHSSS	
A. Project Cost Breakdown (\$000)  Froject Cost Categories  a. Engineering and Technical Services		<u>FY96</u> 445	EY97 467	
B. Budget Acquisition History and Planning Information: N/A				
				· · · · · · · · · · · · · · · · · · ·
Page 30 of 30		,		

RDT&E BUDGET ITEM JUSTI		CATION	SHEET (F	FICATION SHEET (R-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM   Support of th	R-1 ITEM NOMENCLA Support of the National Cor	TURE mmunication	System (NCS	TURE mmunication System (NCS)/P.E. 0303127K	K
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Total 0303127K Cost	4.229	3.733	3.910	4.570	4.571	4.534	5.394	Cont.	Cont.
Enhanced Satellite Capability/N092	.980	.499	.479	.519	.421	.421	1.383	Cont.	Cont.
Interoperability/N088	1.319	1.544	1.507	1.584	1.640	1.603	1.501	Cont.	Cont.
Network Security/N094	.495	.499	.503	.521	.525	.525	.525	Cont.	Cont.
Advanced Intelligent Network/N091	1.435	1.191	1.421	1.946	1.985	1.985	1.985	Cont.	Cont.

A. Mission Description and Budget Item Justification

Information Infrastructure will meet the needs of government NS/EP users. Enhanced Satellite Capability explores developing satellite technologies and applications which include experiment preparation This program element supports Executive Order 12472 of 3 April 1984 which assigns the NCS the mission of assisting the President, the National Security Council, the Office of Science and Technology Policy, and the Office of Management and Budget, in exercising their wartime telecommunications functions and responsibilities, and coordinating the planning for, and provisioning of, Directives which provide additional guidance to the NCS which require that initiatives be developed that will improve the survivability and interoperability of the commercial telecommunications systems agencies which have responsibilities to carry out their essential functions in any emergency. Additionally, this program element will support programs which will help to ensure that the evolving National and terminal modification to experiment with NASA's Advanced Communications Technology Satellite (ACTS), preparing secure voice experiments over American Mobile Satellite Corporation Mobile Satellite (MSAT), and the analysis of the newly proposed low earth systems. Interoperability supports the Federal Telecommunications Standards Program, and ensures interoperability among emerging Network (PSN) in mitigating hacker threats. Advanced Intelligent Network employs newly developed processing that support national security and emergency preparedness requirements, enhance the survivability of U.S. commercial satellites, and provide communications support for Government capabilities to tailor the extensive telecommunications resources of the PSN. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development. National Security and Emergency Preparedness (NS/EP) telecommunications for the federal government under all circumstances. To attain this objective, there are several National Security Decision government communications systems. Network Security supports the Public Switched

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	TEM JUSTI	FICATION	SHEET (	R-2 Exhibit			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM N Support of the	R-1 ITEM NOMENCLATURE Support of the National Communic	<b>FURE</b> nmunication	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	P.E. 0303127	<b>X</b>
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Enhanced Satellite Capability (ESC)/N092	.980	.499	479	.519	.421	.421	1.383	Cont.	Cont.

A. Mission Description & Budget Item Justification:

knowledge of evolving technologies; support development of National Security Telecommunications Advisory Committee (NSTAC) initiatives; evaluate new commercial satellite capabilities; assure that This project will provide greatly enhanced and cost-effective telecommunications for all operational environments with the incorporation of new satellite communication technologies. ESC will acquire industry is aware of NS/EP requirements and stress the importance of these features in new systems; develop concepts and architectures for acquiring advanced satellite communications services and /, work will continue under existing contract vehicles. performing test and evaluation of acquired capabilities. Regarding acquisition strategy

FY1995 Accomplishments:

- Analyze and demonstrate applicability and usefulness of selected Enhanced Satellite Capability (ESC) technologies against NS/EP needs (Funding \$670K; Completion date - Sep 95)
- Perform Asynchronous Transfer Mode (ATM), Integrated Services Digital Network (ISDN), and Synchronous Optical Network (SONET) satellite experiments (Funding \$310K; Completion date - June 95) \$.980M Total 0

#### Y1996 Plans:

- to test SONET, Broadband ISDN (BISDN), and ATM technologies in the KA Conduct experiments utilizing an ACTS High Data Rate (HDR) terminal
  - (spectrum of band width) spectrum (Funding \$174K; Completion date Continuing)
- Research potential of developing satellite technologies and systems: low earth orbit (LEO) and geostationary and plan experimentation (Funding \$151K; Completion date - Continuing) 0
- Identify and determine candidate NS/EP National Information Infrastructure (NII) requirements (priority access, secure voice) that can be served via a satellite platform and experimentation (Funding - \$174K; Completion date - Continuing) \$.499M Total O

#### FY1997 Plans:

- Analyze and document results of NCS ACTS High Data Rate Experiments (Funding \$59K; Completion date Jul 97) 0
- Perform experimentation of NS/EP NII requirements and summarize results. Emphasis of experimentation will be targeted toward evolving Mobile Satellite Systems and influencing their design to include NS/EP desired features (Funding - \$250K; Completion date - Continuing) 0
  - Perform analysis of inventory and evaluate industry activities for the potential of meeting NS/EP requirements (Funding \$170K; Completion date Continuing) \$.479M Total 0

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RDT&E BUDGET ITEM JUST		IIFICATION SHEET		(R-2 Exhibit)			DATE: Mar	March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENCL. Support of the National C	OMENCLA e National Co	ATURE ommunication	System (NCS)	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Enhanced Satellite Capability (ESC)/N092	086	.499	.479	.519	.421	.421	1.383	Cont.	Cont.
ogram Change Sous President's Epprostance Value atments to Approstments to Budge on President's Bunt President's Bunt President's Bunt FY97 reducting: FY97 reductors! N/A since N/A anical: Ath quarter: 3rd q	EY 99. 98. 99. 99. Trican Mobile SCOMM moles and applicability and reposation and applicability sults and operation and operation	e Investment age satellite Those results to the NS/EP results to Imobile satellite.	EY1996  .597  .597  .098  .499  ppropriation  ppropriation  m.  nission.  NS/EP users. le systems applicate systems applicate systems applicates.	1995 EY1996 EY1997 .486 30 .597 .486 30 .597 .486098007 30 .499 .479  'ide Investment appropriation  'ide Investment	ifem.				
FY9/ - 3rd quarter: Analysis of operational mobile satellite systems and their relationship to the NS/EP community.	e systems and the	ir relationship t	o the NS/EP cor	nmunity.					

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	EAKDO	WN (R-3)		DATE: March 1996	96
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 IT Suppo (NCS)	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Enhanced Satellite Capability (N092)	TURE mmunications and Satellite Cap	System ability (N092)	
A. Project Cost Breakdown (\$000)  Project Cost Categories		FY1995	EZ	FY1996	FY1997
ering & Technical Service al		086	499		479
D. Dudget Acquisition History and Planning Information (5000) Performing Organizations					
Support & Management Organization Test & Evaluation Organization Total Project	Budget 276 704 980	Budget 179 320 499	Budget EY1997 138 341 479	Budget To Complete Cont. Cont.	Total Program Cont. Cont.
Page 4 of 14	14				

R-1 Shopping List UNCLASSIFIED

APPROPRIATION/BUDGET ACTIVITY         R-1 ITEM NOMENCLATURE         Support of the National Communication System (NCS)/P.E. 0303127K           RDT&E, Defense Wide/07         COST (in millions)         FY95         FY96         FY97         FY98         FY99         FY90         FY01         Cost to Cost to Communication System (NCS)/P.E. 0303127K         7           Interoperability/N088         1.319         1.544         1.507         1.584         1.640         1.603         1.501         Cont.         Cont.	RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ICATION	SHEET (R	-2 Exhibit			DATE: March 1996	ch 1996	
in millions) FY95 FY96 FY97 FY98 FY00 FY01 Cost to Complete 1.319 1.544 1.507 1.584 1.640 1.603 1.501 Cont.	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support of t	NOMENCL he National C	ATURE ommunication	System (NCS	)/P.E. 030312	7K
1.319 1.544 1.584 1.640 1.603 1.501 Cont.	COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
	Interoperability/N088	1.319	1.544	1.507	1.584	1.640	1.603	1.501	Cont.	Cont.

# A. Mission Description & Budget Item Justification:

systems; the design of initial automated methods for application of standards to systems; the refinement and evaluation of program objectives in evolving technology environment. Regarding Supports the Federal Telecommunications Standards Program. Ensures interoperability among emerging government communication systems, including information systems, by providing the required erability of Government communications and conducts related technical evaluations and standards development. analyses to the NCS Member Organizations and other government agencies through the development of initial specification and correlation of standards for specific types of communication and This project analyzes new telecommunications technologies and their effects on interop acquisition strategy, new reimbursable orders will be used.

## FY 1995 Accomplishments:

- Develop technology and government standards to promote interoperability with emphasis on:
  - o land mobile radio encryption (Funding \$236K; Completion date Sep 95)
    - o cellular encryption (Funding \$238K; Completion date Sep 95)
- is on restoral techniques, teleconferencing and NS/EP requirements for wireless/cellular communications (Funding -Further develop technology standards to ensure interoperability with emphasi \$845K; Completion date - Aug 95) \$1.319M Total

#### FY 1996 Plans:

- Develop techniques and analyses to implement national security and emergency preparedness (NS/EP) requirements in emerging standards for wide-band networks and wireless services of the National Information Infrastructure (Funding - \$694K; Completion date - Continuing)
- trol in asynchronous transfer mode (ATM) networks, to help ensure reliable NS/EP communications (Funding Develop strategies and detailed specifications for methods of congestion cont \$400K; Completion date - Continuing) 0
- Develop analysis methods for determining NS/EP quality requirements for multi-media communications over the National Information Infrastructure (Funding \$450K; Completion date - Continuing) \$1.544M Total O

#### FY1997 Plans:

0

- Develop additional and updated techniques for reliable and secure NS/EP communications in wide-band and wireless networks (Funding \$627K; Completion date Continuing)
  - Develop additional and updated methods and proposed standards for flow controlling asynchronous transfer mode congestion to help ensure reliable NS/EP communications (Funding - \$415K; Completion date - Continuing) 0
    - \$1.507M Total ia NS/EP communications (Funding - \$465K; Completion date - Continuing) Develop analyses, methods, and standards for assessing quality of multi-med 0

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RDT&E BUDGET ITEM JUSTI	GET ITE	M JUSTII	FICATION SHEET		(R-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y				R-1 ITEM Support of t	R-1 ITEM NOMENCLA Support of the National Co	ATURE ommunication	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E.	)/P.E. 0303127K	7K
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Interoperability/N088		1.319	1.544	1.507	1.584	1.640	1.603	1.501	Cont.	Cont.
B. Program Change Summary										
Previous President's Budget (FY 1996) Annionisted Value		EY1995 E 1.319 1	EY1996 E 1.573 1.573	EY1997 1.632						
Adjustment to Appropriated Value Adjustment to Budget Year Since FY 96 President's Budget Current President's Budget	t's Budget			125 1.507						
Change Summary Explanation Funding: FY96 reduction due to congressional adjustments to Defense-wide Investment appropriation FY97 reduction due to revised fiscal guidance. Schedule: N/A Technical: N/A	adjustments t guidance.	o Defense-wide	Investment appi	opriation						
C. Other Program Funding Summary				£	Total					
O&M FY1995 FY1996 FY199 3.044 2.740 3.402	EY1997 FY1998 3.402 3.414	FY1999 3.701	EY2000 EY2001 3.701 3.701	Cont.	Cost Cont.					
D. Schedule Profile										
FY95 - 3rd quarter: Receive analysis from a non-profit academic organization on strategies developed for cell loss probability high-speed digital networks.  FY96 - 3rd quarter: Receive report from Institute for Telecommunications Science on algorithm developed to quarter: Receive report from National Institute of Standards and Technology on rapid (< 1 second) restoral of multi-megabit switched digital circuits	profit acaden for Telecom I Institute of	nic organization munications Sc Standards and T	on strategies de ence on algorith echnology on ra	veloped for cell m developed to pid (< 1 second	n on strategies developed for cell loss probability high-speed digital networks. cience on algorithm developed to quantify quality of multi-media transmission, from a user's perspective. Technology on rapid (< 1 second) restoral of multi-megabit switched digital circuits.	high-speed digit of multi-media i-megabit switc	al networks. transmission, f hed digital circu	rom a user's pen iits.	spective.	
	in the same was the same of th			Page 6 of 14		,				

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	COST BR	EAKDOW	7N (R-3)		DATE: March 1996	966
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITE Support (NCS)/0	R-1 ITEM NOMENCLATURE Support of the National Communic (NCS)/0303127K/Interoperability	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Interoperability (N088)	system	
A. Project Cost Breakdown (\$000) Project Cost Categories			FY1995		FY1996	FY1997
Engineering & Technical Service Total Project			1,319	1,544	<b>4 4</b>	1,507
B. Budget Acquisition History and Planning Information (\$000) Performing Organizations						
Test & Evaluation Organization Product Development Organization Total Project	Budget FY1995 1,181 138 1,319	Budget FY1996 1,231 313 1,544	Budget EX1997 1,209 298 1,507	Budget To Complete Cont. Cont. Cont.	Total Program Cont. Cont.	
	Page 7 of 14	4				

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGI	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ICATION	SHEET (R	-2 Exhibit)			DATE: March 1996	ıh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Support of the	R-1 ITEM NOMENCLATURE Support of the National Communic	TURE mmunication	System (NCS	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	7K
COST (in millions)	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	Cost to Complete	Total Cost
Network Security/N094	.495	.499	.503	.521	.525	.525	.525	Cont.	Cont.

# A. Mission Description & Budget Item Justification

This project was initiated to mitigate the hacker threat posed to NS/EP telecommunications carried via the Public Switched Network (PSN). The research gained from this project will be used to develop a consistent framework of guidelines that will be useful to government and industry in assuring that critical software supporting and/or controlling telecommunications switches can be trusted to perform as required in support of the PSN. Regarding acquisition strategy, new reimbursable orders will be used.

## FY1995 Accomplishment:

- Continue joint Office of the Manager National Communications System (OMNCS) and National Institute for Standards and Technology (NIST) efforts to assure security of software \$.495M Total and databases associated with the PSN (Funding - \$495K; Completion date - Continuing) FY1996 Plans:
- Develop software tools useful in identifying and eliminating security vulnerabilities from large computer programs such as those used in communications systems (Funding \$299K; Completion date - Continuing)
  - Evaluate security tools and techniques relevant to communication systems and provide guidelines for protecting communications systems from computer intruders (Funding \$200K; Completion date - Continuing) \$.499M Total 0

#### FY1997 Plans

0

- o Develop additional tools to identify and eliminate security vulnerabilities in large computer programs such as those used in communications systems. Update previously developed tools for application to emerging computer systems (Funding \$301K; Completion date Continuing)
  - Evaluate additional security tools and techniques relevant to communications systems and provide updated guidelines (Funding \$202K; Completion date - Continuing) \$.503M Total

## Program Change Summary M,

	FY1995	FY1996	FY1997	
Previous President's Budget (FY 1996)	.495	.499	.503	
Appropriated Value	.495	.499		
Adjustments to Appropriated Value	0	0		
Adjustments to Budget Year Since FY 96 President's Budget			0	
Current Budget Submit/President's Budget	.495	.499	.503	

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RDT&E BI	UDGETI	RDT&E BUDGET ITEM JUST	FICATI	FICATION SHEET (R-2 Exhibit)	(R-2 Exhibit)	(1)		DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	VITY				R-1 ITEM I Support of th	R-1 ITEM NOMENCLATURE Support of the National Communic	TURE	System (NCS)	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	M
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Network Security/N094		.495	.499	.503	.521	.525	.525	.525	Cont.	Cont.
Change Summary Explanation Funding: N/A Schedule: N/A Technical: N/A										
C. Other Program Funding Summary						£	F.			
EY1995 0&M 1.164	<u>FY1996</u> 1.300	EY1997 1.300	<u>FY1998</u> 1.300	<u>FY1999</u> E 2.718 5.6	EY2000 EY2001 5.617 6.371	10 001 Compl Cont.	Cont.			
D. Schedule Profile										
FY95 - 3rd quarter: Federal Information Processing Standard on Telecommunications Security  FY96 - 4th quarter: Beta test version of "Decomposition Slicing" tool for analyzing effects of maintenance changes in large computer programs  FY97 - 4th quarter: Evaluations of security features in switches performed by the Telecommunications Security Analysis Center	rocessing Star Decomposition y features in s	ndard on Telecon  Slicing" tool for witches performe	nmunications analyzing eff d by the Tele	Security exts of maintenand communications Sa	e changes in larg curity Analysis C	e computer prog center	,rams			
	•									
				Page 9 of 14						

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	AKDOWN (R-3)	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Network Security (N094)	ons System (NCS)/0303127	K/Network
A. Project Cost Breakdown (\$000)	FV1995	FV1006	EV1007
Project Cost Categories		0621	£1133/
Engineering & Technical Service	495	499	503
B. Budget Acquisition History and Planning Information: N/A Page 10 of 14	4		

R-1 Shopping List UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	GET ITEN	4 JUSTIF	ICATION !	SHEET (R	-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	,				R-1 ITEM   Support of th	R-1 ITEM NOMENCLA Support of the National Co	TURE ommunication	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	/P.E. 030312	7K
COST (in millions)		FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	Cost to Complete	Total Cost
Advanced Intelligent Network/N091		1.435	1.191	1.421	1.946	1.985	1.985	1.985	Cont.	Cont.

## A. Mission Description & Budget Item Justification

This project is required to employ newly developed processing capabilities to tailor the extensive telecommunications resources of the existing Public Switched Network (PSN), which includes the Local these components, in a customized set of network services that can be flexibly, rapidly and cost effectively configured by customers upon demand on an as needed basis. Regarding acquisition strategy, Intelligent Network (AIN) is an evolving PSN capability consisting of signaling systems, switches, computer processing, databases and transmission media. This research will result in the utilization of Exchange Carrier (LEC) and Inter Exchange Carrier (IEC) Networks, thus enhancing connectivity and survivability of services for essential government users during periods of emergency. Advanced work will continue under current contract vehicles

### FY1995 Accomplishments:

- Conduct studies to determine reliability and survivability of the configuration of AIN capabilities, previously selected, and the networks supporting them (Funding \$415K; Completion date - May 95)
- the Defense Information Systems Network, and potential interface and assess AIN NII opportunities for Assess interoperability of AIN with other systems such as FTS 2000 and NS/EP (Funding - \$310K; Completion date - Sep 95)
  - Demonstrate AIN capabilities and their applications to NS/EP telecommunications and other Government networks, through a laboratory trial of the AIN candidate configuration selected and related technology (Funding - \$710K; Completion date - Aug 95) \$1.435M Total

#### FY1996 Plans:

- Evaluate AIN industry developments and capabilities for potential applications to NS/EP telecommunications (Funding \$150K; Completion date Continuing) 0
- Determine AIN relationship to evolving National Communications System (NCS) requirements for advanced intelligent capabilities and data services, define applications for implementation into OMNCS initiatives (Funding - \$350K; Completion date - Continuing)
- Research AIN interoperability with emerging technologies such as Integrated Services Digital Network (ISDN), Asynchronous Transfer Mode (ATM) and Personal Communications 1g - \$350K; Completion date - Continuing) for potential integrated voice, data, wireline and wireless services (Fundin (PCS),
  - Analyze AIN Bellcore generic requirements for potential NS/EP considerations and influence AIN implementation as the technology becomes standardized (Funding \$170K; Completion date - Continuing) 0
- Research mediated access FCC issues for further development of AIN switches and elements (Funding \$171K; Completion date Continuing) \$1.191M Total 0

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RDT&E BUD	RDT&E BUDGET ITEM JUSTIK	FICATION SHEET (R-2 Exhibit)	SHEET (F	k-2 Exhibit)			DATE: March 1996	sh 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	Y			R-1 ITEM Support of t	R-1 ITEM NOMENCLA Support of the National Co	ATURE ommunication	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	)/P.E. 030312	7K
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Advanced Intelligent Network/N091	1.435	1.191	1.421	1.946	1.985	1.985	1.985	Cont.	Cont.

#### FY1997 Plans:

- Research and develop AIN candidate configurations of potential voice and data AIN services in support of NS/EP emerging requirements and those necessary to support emergency operations on the NII (Funding - \$350K; Completion date - Continuing) 0
  - o Plan for and demonstrate proof of concept strategies for offering AIN services and demonstrate interoperability across the Public Switched Network (PSN) across multiple service providers and with other technologies such as ISDN, ATM and PCS (Funding \$460K; Completion date Continuing) \$460K; Completion date - Continuing)
    - Assess AIN survivability, reliability, interoperability and security concerns for NS/EP voice and data applications and influence industry to act on NS/EP concerns (Funding \$300K; Completion date - Continuing)
- Follow-on to FY96 initiatives to plan demonstrations that remain current with planned industry capabilities and issues, and influence the design of AIN services to be responsive to the needs of the NS/EP community (Funding - \$311K; Completion date - Continuing) \$1.421M Total

B. Program Change Summary				
	FY1995	FY1996	FY1997	
Previous President's Budget (FY 1996)	1.435	1.393	1.421	
Appropriated Value	1.435	1.393		
Adjustments to Appropriated Value	0	202		
Adjustments to Budget Year Since FY 96 President's Budget			0	
Current President's Budget	1.435	1.191	1.421	

Change Summary Explanation

Funding: FY96 reduction due to congressional adjustments to Defense-wide Investment appropriations

Schedule: N/A

Technical: N/A

C. Other Program Funding Summary: N/A

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R	RDT&E BUDGET ITEM JUSTI	ITEM JUSTI	FICATION SHEET (R-2 Exhibit)	SHEET (R	-2 Exhibit)			<b>DATE:</b> March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ET ACTIVITY				R-1 ITEM Support of the	R-1 ITEM NOMENCLA Support of the National Co	TURE ommunication	System (NCS	R-1 ITEM NOMENCLATURE Support of the National Communication System (NCS)/P.E. 0303127K	7K
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost to Complete	Total Cost
Advanced Intelligent Network/N091	091	1.435	1.191	1.421	1.946	1.985	1.985	1.985	Cont.	Cont.
D. Schedule Profile										
FY95 - 1st/2nd quarter: AIN an FY96 - 4th quarter: Contra	AIN and Intelligent ISDN Demonstrations Contract Award - 1 October 1995	onstrations 95								
	AIN Multimedia Applications for NS/EP Develop AIN Open Network Architecture and Demonstrations	or NS/EP rchitecture and Demo	onstrations							
			••							
			P	Page 13 of 14				Constitution to		

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	REAKDOWN (R-3)	3)	DATE: March 1996	arch 1996
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	R-1 ITEM NO Support of the N (NCS)/0303127	R-1 ITEM NOMENCLATURE Support of the National Communications System (NCS)/0303127K/Advanced Intelligent Network/N091	ons System int Network/N09	
A. <u>Project Cost Breakdown</u> (\$000)  Project Cost Categories	EY1995	FY1996	9	FY1997
Engineering & Technical Service Total Project	1,435	1,191		1,421
B. Budget Acquisition History and Planning Information (\$000)  Performing Organizations	Dardant			
Support & Management Organization  FY1995  Product Development Organization  933  1,435	EY1996 487 704 1,191	EY1997 497 924 1,421	Cont.	Program Cont.
Page 14 of 14	.14			

R-1 Shopping List UNCLASSIFIED

RDT&E BUDC	RDT&E BUDGET ITEM JUSTI	FICATION	SHEET (	FICATION SHEET (R-2 Exhibit)	<b>(</b>		DATE: March 1996	farch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	TIVITY			R-1 ITEN Defense N	R-1 ITEM NOMENCLATURE Defense Message System/PE 0303129K	CLATURI tem/PE 030	L 3129K		
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H80 Defense Message System (DMS)	*0	*0	2.532	2.674	2.745	2.845	2.938	Contg	Contg

Prior to FY 1997, it was funded in PE0303126K. The purpose of this project is to provide system engineering to that which is in place today. Current support is focused on developing secure messaging/directory/management interoperability requirements and components/services; technology insertion and service demonstrations; and influencing industry to include DMS features as part of their standard product offerings. services through requirements definition and refinement, target component Developmental, Initial and Final Operational Test and Evaluation (DT&E, IOT&E and FOT&E); developing transitional the use of a COTS-based, multi-level secure messaging and directory service. The DMS provides the defense This program element is under budget activitiy 07 because it supports operational systems development. \*This project is not a new start. ensure that JS and OSD (C3I) validated messaging requirements are satisfied through community with a more interoperable, cost effective messaging/directory service than A. Mission Description & Budget Item Justification:

## (U) FY 1995 Accomplishments:

Work is performed in PE0303126K.

## (U) FY 1996 Accomplishments;

Work is performed in PE0303126K.

#### (U) FY 1997 Plans:

- o Perform transition planning for Post IOC sensitive but unclassified and classified DMS users, including cross program integration (GCCS, EC/EDI, etc.) and tactical. (\$816K) (Cont.)
- o Support the Post IOC test and evaluation effort through JWID and Technical Insertion Network scenario development, execution, & results analysis and finalization of revisions to Functional Security & Performance (FSP) criteria and compliancy definition. (\$426K) (Cont.)
- o Perform system lifecycle/evolution engineering to account for growth, policy and requirements changes, MISSI and commercial product changes, etc. (\$446K) (Cont.)
  o Develop and promote DOD/DMS requirements and positions on data communications protocol issues via military and civilian, national and international standards fora. (\$844K)(Cont.)

\$2.532M Total

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RDT&E BUDGET ITEM JUST	DGET ITE	M JUSTI	FICATIO	N SHEET (	IFICATION SHEET (R-2 Exhibit)			DATE: March 1996	ch 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	TY				R-1 ITEM N Defense Mess	R-1 ITEM NOMENCLA Defense Message System/PE	.TURE 0303129K			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Project H80 Defense Message System (DMS)		*0	*0	2.532	2.674	2.745	2.845	2.938	Contg	Contg
B. Program Change Summary				FY95	Ē.	FY96	Į.	V97		
Previous President's Budget (FY 1996) Appropriated Value				* *		* *	7	2.653		
Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation:	President's Bud	ğet		* *		* *	. 4	121 2.532		
Funding		*FY	95 - FY96 : War 97: Changes	FY95 - FY96: Work is performed in PE0303126 FY97: Changes are due to revised inflation rates.	*FY95 - FY96: Work is performed in PE0303126K. FY97: Changes are due to revised inflation rates.					
C. Other Program Funding Summary	FY96	FY97	. 26	FY98	FY99	FY00		FY01		
O&M Proc	20,700 30,100	34,497 41,397	197 197	34,206 44,685	36,111 44,569	21,148		14,403 20,734		
D. Schedule Profile									,	
(U) <u>FY 1995</u> (U) <u>FY 1996</u> (U) <u>FY 1997</u> (U) <u>FY 1997</u> Engineering Milestones: Finalized Tactical Standardized Profile (4 Qtr)	idardized Profile	(4 Qtr)								
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	RDT&EP	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	LEMENT/PRC	JECT CC	ST BR	EAK	DOWN	(R-3)	DA	DATE: March 1996
APPROPRIATION/BUD RDT&E, Defense Wide/07	PRIATION/BUDGET ACTIVITY, Defense Wide/07	ACTIVITY				A D	-1 ITEM sfense Me	R-1 ITEM NOMENCLAT Defense Message System/PE 03	ATURE E 0303129K	
A. Project Cost Breakdown Project Cost Categories (\$000K)	reakdown ories (\$000K)	Ş		Ţ <del>z.</del>	FY95			FY96 0	FY97 2.532	
Total	a. Engineering and recimical services  Total	3			0			0	2,532	
B. Budget Acquist Contractor or Government Performing Activity	ition History and Pl Contract Method/Type or Funding Vehicle	B. Budget Acquisition History and Planning Information Contractor or Contract Government Method/Type Award or Performing or Funding Obligation Activity Vehicle Date	Performing Activity EAC	Project Office EAC	田田	Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total
All Other Contracts Product Developme USAISC AT&T Other Contracts	nt Organization MIPR CPAF	18 21 Dec 95 20 Dec 95 20 Dec 95				000	000	360 470.5 382	Continuing	Continuing
Support and Mana MITRE	Support and Management Organizations MITRE Procurement Work	ment Organizations Procurement Work Directive (PWD)				0	0	1319.5	Continuing	Continuing
		Subtotal Contracts	ts			0	0	2,532		
In House Engineer	Engineering & Technical Support	upport								
					Page 3 of 3	<b>در</b>				

							DATE: March 1996	h 1996	
RDT&E BUDGET ITEM JUSTII	I ITEM JUSTIF	ICATION	SHEET (R	FICATION SHEET (R-2 Exhibit)					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM I Minimum Es	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Co	TURE ency Commu	nications Netw	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K	/0303131K
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Total Program Element (PE) Cost	3.237	2.620	2.311	2.482	2.612	3.030	3.462	Contg	Contg
Strategic C3 Support/T70	3.237	2.361	2.075	2.227	2.340	2.716	3.103	Contg	Contg
Contingency Planning for the President/T71	•0	.259	.236	.255	.272	.314	.359	Contg	Contg

A. Mission Description and Budget Item Justification:

instability. This support also provides informed decision-making linkage between the NCA and the Commanders-in-Chief (CINC) of the Unified and Specified Commands. DISA performs this task as Nuclear C3 (NC3) Systems Engineer. It specifically ensures a balanced, integrated capability is maintained. This project provides direct long range and specialized support to ASD(C3I) and Joint Staff (JS) for determining which programs should be supported and/or canceled, as well as supports fail safe and risk reduction. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development. connectivity between National Command Authorities (NCA) and strategic and other appropriate forces to assure adequate command and control is maintained throughout all phases of conflict and This program focuses on ensuring the implementation of national policy requiring nuclear Command, Control and Communications (C3) systems; support positive control of nuclear forces, and

Page 1 of 7

<sup>\*</sup>In FY95, this project is funded in Program Element 0302016K. It is not a new start.

	DRY OF DITACET ITEM HISTIRICATION SHEET (D. 2 E-bibit)		Tagno	D 2 V-hihi			DATE: March 1996	h 1996	
KUI&L DUD	GET IIEM JUST	IFICATIO	) Idans	N-2 EALIDI	· )				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	X.			R-1 FFEM   Minimum Es	R-1 ITEM NOMENCLAT Minimum Essential Emerger	TURE gency Commu	rure ncy Communications Network (MEECN)/0303131K	ork (MEECN)	/0303131K
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Strategic C3 Support/T70	3.237	2.361	2.075	2.227	2.340	2.716	3.103	Contg	Contg

A. Mission Description & Budget Item Justification:

to global are considered. Fiscal constraints and other top level guidance are also significant factors influencing these plans. The second element is Operational Assessments of the fielded C3 systems and ce and participates in all nuclear C3 system life cycle systems engineering related functions. It includes mission and Chiefs of Staff (JCS), CINC and nuclear forces worldwide. The third element of this project is to maximize the operational readiness of the National Military Command System (NMCS) by developing includes both strategic, theater-to-national level C3 interfaces into the Nuclear Command and Control and Communications (NC3) systems. The tests are performed in an operational setting with Joint System (NCCS), i.e., strengths and weaknesses and determines the best investment strategy to evolve the current NCCS to achieve the desired capability. Threats-from terrorist activities-to regional-This project has four elements: strategic planning, operational assessments, communications plans, and engineering. Together, these elements perform all of the functions of the Nuclear C3 system's vulnerability assessments done to ensure NCA and Nuclear C3 are always adequate under all conditions of stress or war. It evaluates the operational capability for the Nuclear Command and Control weapons platforms. This assessment is the sole means for positive verification of the communications plans, procedures, op-orders, training, equipment and system configuration from end-to-end. It communications plans, procedures, Operations Orders and Battle Staff certification, and keeping these plans and procedures accurate as policy and forces change. Under this element, Battle Staff engineer, and all of the NCA and Nuclear C3 support for ASD(C3I). The first element is Strategic Planning which is done for ASD(C3I) and the Joint Staff. These are the long range plans and functional technical requirements definition; alternative designs and solutions; program policy and guidance; subsystem and network integration; modeling; test and evaluation; development, deployment, installation, and problem isolation. This element resolves design, engineering, performance, and interoperability issues for critical, strategic systems. proficiency is verified. The fourth element of this project provides engineering guidan

## (U) FY 1995 Accomplishments:

- Operations assessment (Sep 95; \$1,140K). Continue Strategic NC3T&E/Non-Strategic Nuclear Forces (NSNF) C3 0
  - o Nuclear C3 Assessment (Sep 95; \$1,435K).
    - o Communications Plans (Sep 95; \$402K)
- Review Architecture (Sep 95; \$260K). ASD(C3I) Special Studies: Develop implementation of Nuclear Posture

\$3.237M Total

Page 2 of 7

RDT&E BUDGET ITEM JUSTI	T ITEM JUST	FICATION SHEET	N SHEET (	(R-2 Exhibit)			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM P Minimum Es	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K	TURE ency Commu	ications Netwo	ork (MEECN)	/0303131K
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Strategic C3 Support/T70	3.237	2.361	2.075	2.227	2.340	2.716	3.103	Contg	Contg
(U) EY 1996 Plans:  o Confinue reduced Nuclear C3 Operational Assessments/Positive Command and Control (Sep 96; \$1,238K).  o Confinue selected Communication requirement for Proliferation (Sep 96; \$232K).  o Commence validating new architecture implementing Nuclear Posture Review (NPR) recommendations (Sep 96; \$161K).  \$2.361M Total  (U) EX 1997 Plans:  o Continue selected Communications plans updating and certifications (Sep 97; \$350K).  o Continue selected Communications plans updating and certifications (Sep 97; \$350K).  o Confinue selected Communications plans updating and certifications (Sep 97; \$350K).  o Confinue selected Communication requirement for Proliferation (Sep 97; \$350K).  o Confinue selected Communications plans updating and certifications (Sep 97; \$1450K).  s Confinue selected Communications requirement for Proliferation (Sep 97; \$350K).  o Confinue selected Communications requirement for Proliferation (Sep 97; \$350K).  o Conjecte NC3 communications requirement for Proliferation (Sep 97; \$350K).  o Complete NC3 communications (Sep 97; \$1450K).  \$2.075M Total  Acquisition strategy: MITRE Corporation, McLean, VA; Electrospace Systems Inc., Arlington, VA; Naval Research and Development Center (NRAD), San Diego, CA; Sciences Applications threegy: MITRE Corporation (SAIC), McLean, VA; Naval Space and Warfare Systems Command (SPAWAR), Washington, DC.  B. Program Change Summary  B. Program Change Summary  Appropriated Value  Adjustments to Appropriated Value  Adjustments to Appropriated Value  Adjustments to Budget Fersident's Budget  Communications and Control (Sep 97; \$1337)  Confidence of Confidence of Sep President's Budget  Adjustments to Budget Versal (Sep President's Budget)  Approach (Sep 97; \$104)  Approach (Sep 97; \$104)	al Assessments/Positivs updating and certification requirement for Prolecar mplementing Nuclear al Assessments/Positivs updating and certificatent for Proliferation (Commercial-Off-The-Sommercial-Off-The-Sommercial-Off-The-Sity Electrospace Systematical Space and Warfare Sity Budget	e Command an ations (Sep 96; 3 roliferation (Sep 96; 3 stions (Sep 97; \$450K) Sep 97; \$450K) Shelf (COTS) ears Inc., Arlingtows Inc., Arlingtows its inc., A	d Control (Sep 9 \$433K). 96; \$529K). (NPR) recomm d Control (Sep 9 \$350K).  juipment into Napuipment into Napu	96; \$1,238K). 17; \$1,204K). 18: Sep 97; \$71k 19: Sesearch and Dev 19: Washington, DC 2 2 4 4	96; \$161K). IK).  FY96 2.047 4.314	r (NRAD), San	In Diego, CA; Sci 1.971 1.971 1.04	ences Application	SEC
Change Summary Explanation:  Change Summary Explanation:  FY95 and FY96 increase due to below threshold reprogramming.  FY97 increase due to revised fiscal guidance.  C. Other Program Funding Summary  Oneration and Maintenance:	shold reprogramming. e.		FY95 207	EY96	EY97	, 40	Total Cost		
			Page 3 of 7				)		

RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET	FICATION		(R-2 Exhibit)			DATE: March 1996	th 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMEN Minimum Essential Er (MEECN)/0303131K	CCL.	ATURE gency Commu	ATURE gency Communications Network	vork	
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Strategic C3 Support/T70	3.237	2.361	2.075	2.227	2.340	2.716	3.103	Contg	Contg
D. Schedule Profile									
Events cited below occur in each fiscal year (1995-1997).	1997).								
1 Qtr - Strategic Mobile Command Center Operation Order completed for Joint Staff. 1 Qtr - Strategic Communications Assessment (Polo Hat) completed for Joint Staff. 1 Qtr - Joint Staff/CINC Staff Assistance Exercise (CINCSPACE, CINCSTRAT, National Airborne Operation Center). 1 Qtr - ASD(C3I) "Nuclear C3 Review" Report. 1 Qtr - Non-Strategic Communications Exercise completed for Joint Staff. 1 Qtr - Final Nuclear C3 System Description completed for Joint Staff.	n Order completed for Joint Hat) completed for Joint CINCSPACE, CINCSTR mpleted for Joint Staff.	int Staff. : Staff :AT, National Airl	porme Operation	Center).				-	
2 Qtr - Nuclear C3 Systems Engineer Annual Report to ASD/C3I. 2 Qtr - Joint Staff/CINC Staff Assistance Exercise (CINCPAC). 2 Qtr - Strategic Communications Assessment (Polo Hat) completed for Joint 2 Qtr - Non-Strategic Communications Evaluation CINCEUR.	rt to ASD/C3I. CINCPAC). Hat) completed for Joint CINCEUR.	t Staff							
3 Qtr - Complete Fiber Communications System (FCS). 3 Qtr - Strategic Communications Assessment (Polo Hat) completed for Joint Staff. 3 Qtr - Emergency Communications Procedures CJCS Emergency Action Procedures (EAP) Vol 7 completed for Joint Staff.	CS). o Hat) completed for Join JCS Emergency Action P	nt Staff. rocedures (EAP)	Vol 7 completed	l for Joint Staff.					
4 Qtr - Complete Early Pentagon Connectivity Modernization. 4 Qtr - NMCS/ DOD Emergency Communications Plan completed for Joint Staff.	lernization. Plan completed for Joint	Staff.							
					•				
			De-2 4 267						

	RDT	&E PROC	3RAM EL	EMENT/	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	COST BR	EAKDO	WN (R-3)		DATE: March 1996		
APPROPRI RDT&E, De	PRIATION/BUDGET ACTIVITY, Defense Wide/07	GET ACTI	VITY				<b>R-1 F</b> Minim 03031	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Comm 0303131K/Strategic C3 Support (T70)	ATURE ncy Communication oport (T70)	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/ 0303131K/Strategic C3 Support (T70)	<u> </u>	
A. Project Co	Project Cost Breakdown					FVOS		FVOC		EVOS		
Project Co	Project Cost Categories					2613		2		77		
a. System:	a. Systems Engineering					3,237		2,361	2,(	2,075		* 1.1.1.11111111
TOTAL						3,237		2,361	2,0	2,075		
B. Budget Ac Support and Ma	B. Budget Acquisition History and Planning Information Support and Management Organizations	v and Planning zations	Information									
Contractor or Government Performing	Contract Method/Type or Funding	Award or Obligation <u>Date</u>	Performing Activity <u>EAC</u>	Project Office EAC	Prior to EY95	D IT	Budget FY95	Budget FY96	Budget EY97	Budget To Complete	Total Program	
Multiple Performing Activities	SS/C CPAF CPFF MIPR WR				-	<b>M</b>	3,237	2,361	2,075	Contg	Contg	
TOTAL PROJECT	ECT					e	3,237	2,361	2,075			
						Page 5 of 7	1.3					

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	ET ITEM	JUSTI	TCATION	SHEET (	R-2 Exhibit			DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07					R-1 ITEM ? Minimum Es	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Co	TURE ency Commun	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/0303131K	ork (MEECN)	/0303131K
COST (in millions)	H	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Contingency Planning for the President (CPP)/T71	0*		.259	.236	.255	.272	.314	.359	Contg	Contg

A. Mission Description & Budget Item Justification:

 \*This project was transferred from Program Element 0302016K. All aspects of this project are classified and require special access. Therefore, information on this project is not contained in this document but can be obtained upon request.

FY97	.208			+.028	.236		
FY96	.222	.222	+.037		.259		
B. Program Change Summary FY95	Previous President's Budget (FY1996)	propriated Value	Adjustments to Appropriated Value	Adjustments to Budget Year since FY96 President's Budget	Current Budget Submit/President's Budget Transferred from P.E. 0302016K	Change Summary Explanation:	FY96 and FY97 increases due to program adjustments.
B. I	<u> </u>	¥	V	¥	<u>ں</u>	ں ا	

## C. Other Program Funding Summary

Related RDT&E: PE 0302016K in FY95.

D. Schedule Profile

Information can be provided upon request.

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3	ECT COST BRE	BREAKDOWN (R-3)	DATE: March 1996	96
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07		R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Networ 0303131K/Contingency Planning for the President (T71)	R-1 ITEM NOMENCLATURE Minimum Essential Emergency Communications Network (MEECN)/ 0303131K/Contingency Planning for the President (T71)	EECN)/
A. Project Cost Breakdown	FV95	FV96	FV97	
Project Cost Categories				
a. Systems Engineering	0	259	236	
TOTAL	0	259	236	
B. Budget Acquisition History and Planning Information Support and Management Organizations				
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Prior to Activity Vehicle Date EAC EAC FY95	to Budget	et Budget FY96	Budget To EY97 Complete	Total <u>Program</u>
Miscellaneous		0 259	236	
Government Furnished Property: N/A				
TOTAL PROJECT		0 259	236	
	ra- ra-d			
	rage / OI /			

								DATE: March 1996	sh 1996	
RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DGET IT	EM JUSTI	FICATION	SHEET (	R-2 Exhibit					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ACTIVIT	Y			R-1 ITEM C4I for the Wa	R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K	LATURE			
COST (in millions)		FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Joint C3I Surveillance & Reconn./D8A		0	0	2.907	2.884	2.861	2.837	2.814	Contg	Contg

will support experiments in mission, mission support and technology with actual battle scenarios and assessment specific parameters, utilizing the latest technology insertion and applications to provide a environment for Joint operational innovations. Industry driven technology advancements dictate rapid insertion into the DOD C4ISR infrastructure to maintain this competitive advantage. The Center consistently improving state of readiness for the joint warfighter. Furthermore, the Center will reduce overlap in modeling and simulation efforts among the Military Services. This program element is is a new initiative that promotes joint and coalition C4I Interoperability. This effort supports the Joint Command, (C4ISR) Battle Center and will assimilate demonstrations and experiments of large scale engineering required for concepts. The Center will ensure that as new C4ISR concepts surface, these concepts will be developed to share all C4ISR information with precision force generators which will engender a powerful advantage dependent on the ability to effectively field evolutionary systems and equipment which assure joint operational capability dominance by quickly organizing and testing innovative CAISR architecture development of Joint warfighting systems integration which leverage C4ISR. The Center provides comprehensive joint warfighting capability that maintains a competitive military C4I for the Warrior (C4IFTW) Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance under Budget Activity 07 because it supports operational systems development. A. Mission Description & Budget Item Justification:

- (U) FY 1995 Accomplishments: N/A
- (U) FY 1996 Accomplishments: N/A
- (U) FY1997 Plans:

o Strategic Plan for global interoperability for US military forces during deployment and resolving C4I interoperability issues (\$2,907K)

RDT&E BUDGET ITE	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION SH	EET (R-2 Ext	T (R-2 Exhibit)			DATE: March 1996	DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM NOMENCLATI C4I for the Warrior/03031491	ITEM NOMENCLATU for the Warrior/0303149K	U <b>re</b> K			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Joint C3I Surveillance and Reconn./D8A	0	0	2.907	2.884	2.861	2.837	2.814	Contg	Contg
B. Program Change Summary Previous President's Budget (FY 1996)			EY95		EY96			<u>FY97</u> 0	
Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation:	ıt's Budget							2.907	
Funding: FY97 change due to new start of PE 0303149K.	3149K.								
Schedule: N/A Technical: N/A									
C. Other Program Funding Summary									-
O&M Procurement		EY95 0 0	EY96 0 0		<u>FY97</u> 11.657M 4.814M	Total Cost Contg Contg			
D. Schedule Profile									
(U) FY 1995 Not applicable									
(U) FY 1996 Not applicable									
(U) FY 1997  o 1st Quarter - Execute contract support									
			Page 2 of 3		·				

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	M ELEMENT/PROJECT COST BRE	OST BREAKE	OWN (R-3)			DATE: March 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07			R-1 ITE	R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K/Joi	RE /Joint C3I Surve	R-1 ITEM NOMENCLATURE C4I for the Warrior/0303149K/Joint C3I Surveillance & Reconn./D8A	
A. <u>Project Cost Breakdown</u> (\$000) Systems Engineering		₩.	FY95 0	EY96 0		<u>FY97</u> 2,907	
B. Budget Acquisition History and Planning Information							
Contractor or Contract Government Method/Type Award or Performing Project Performing or Funding Obligation Activity Office Activity Vehicle Date EAC EAC Program	Prior to EY95	Budget FY95	Budget FY96	Budget FY97	Budget To Complete	Total	
All Other Contracts	0	0	0	2,907	Contg	Contg	
Subtotal Contracts	0	0	0	2,907			
In House Engineering & Technical Support: N/A	·						
TOTAL PROJECT	0	0	0	2,907			
				-			
		Page 3 of 3	3				

							DATE: March 1996	ch 1996	
RDT&E BUDG	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FICATION	N SHEET	R-2 Exhibit	()				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM   Joint Spectr	R-1 ITEM NOMENCLATURE Joint Spectrum Center/0303153K	TURE 3153K			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Joint Spectrum Center PE 0303153K		4.712	•		•	•	٠	Contg	Contg

Specifically, the Center designs, develops, and maintains DOD automated spectrum management systems, evaluation tools, and databases employed by the Services, DOD Agencies, and Unified Commands. The JSC databases are the prime sources of information for DOD use of the systems in military operations. This Center is the focal point for spectrum related support, Electromagnetic Environmental Effects (E3), and EM interference resolution assistance to operational units The JSC provides advice and assistance to DOD activities to ensure development and acquisition of electromagnetically compatible systems and for the effective deployment of these deployable support to CINC Joint Task Forces. Its mission is integral to other vital activities such as Information Warfare (TW), Command and Control (C2) Protect and other defensive C3 (JSC) serves as the DOD focal point for electromagnetic (EM) spectrum management matters in support of the warfare activities as directed by the Joint Staff. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development. Unified Commands, Military Departments, and Defense Agencies in planning, acquisition, training, and operations. Mission Description & Budget Item Justification: (U) The Joint Spectrum Center EM spectrum.

\*NOTE: FY95 RDT&E funding was budgeted within the Air Force under PE 0303144F, Electromagnetic Compatibility Analysis Center (ECAC) which was renamed the Joint Spectrum Center effective 28 Sep 94. DOD transferred funds and Executive Agent responsibility from the Air Force to DISA for the JSC and, effective FY96, PE 0303153K for the JSC was established under DISA. However, FY 1997 and outyear funds will be transferred back to the Air Force effective FY97.

# (U) FY 1995 Plans: EFFORT ACCOMPLISHED UNDER PE 0303144F

- (U) FY 1996 Plans: (\$ in Millions)
- Continuous improvement of the Frequency Resource Record System and other DOD EMC databases will be accomplished in accordance with requirements of the CINCs and Services, 0
  - including some hardware improvements to replace aging equipment. \$3.212M (Continuing)

    Limited support for management of DOD E<sup>3</sup> Program including development of a strategic plan, conduct conferences, coordinate EMC, Ordnance and Personnel Hazards efforts, and development of models and simulations to support E3 analyses. \$1.5M (Continuing) \$4.712M Total 0
- (U) FY 1997 Plans: EFFORT TO BE ACCOMPLISHED UNDER PE 0303144F

Acquisition Strategy. Full and open competitive procurement of the contractual support for the Center.

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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	FEM JUSTIF	ICATIO]	N SHEET	r (R-2 e	xhibit)			DAIE: March 1996	cn 1990	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1	FFEM NC Spectrum	R-1 ITEM NOMENCLAT Joint Spectrum Center/03031	ATURE 03153K			
COST (in millions)	FY95	FY96	FY97	E	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Joint Spectrum Center PE 0303153K	*	4.712	*	*	10000	*	*	*	Contg	Contg
B. Program Change Summary  Previous President's Budget (FY 1996)  Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year Since FY 1996 President's Budget Current Budget Submit/President's Budget Change Summary Explanation: Funding: Schedule: N/A Technical: N/A C. Other Program Funding Summary	dent's Budget FY96 reduct	tion due to co	ongression	FY all adjustme	FY95  # tment to Defe	ense-Wide	FY96 4.859 4.859147 4.712 le Investment A To	FY95  FY96  4.859 147  5 Budget  FY96 reduction due to congressional adjustment to Defense-Wide Investment Appropriation.  To To FY96  FY96 FY97 FY98 FY99 FY00 FY01 Completed to Complete to Compl	FY97 4.883 0 Total	
0&M			~~					ıtg	contg	

\*NOTE: FY95 RDT&E funding was budgeted within the Air Force under PE 0303144F, Electromagnetic Compatibility Analysis Center (ECAC) which was renamed the Joint Spectrum Center effective 28 Sep 94. Funds and Executive Agent responsibility were transferred from the Air Force to DISA effective FY96, (PE 0303153K); however, they will be transferred back to the Air Force effective FY97.

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RDT&E BUDGET ITEM JUSTIF	TIEM JUSTIFI	CATION	SHEET (R	ICATION SHEET (R-2 Exhibit)			DATE: March 1996	th 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07				R-1 ITEM Joint Spectra	R-1 ITEM NOMENCLATURE Joint Spectrum Center/0303153K	ATURE 03153K			
COST (in millions)	FY95	FY96	FY97	FY98	FY99	FY00	FY01	Cost of Complete	Total Cost
Joint Spectrum Center PE 0303153K		4.712			*			Contg	Contg
D. Schedule Profile			1995	3 4	1 2	1996		1997 2 3	4
Contract Milestones Improve Frequency Resource Record System and other DoD EMC data bases Electromagnetic Environmental Effects Analyses Support	DoD EMC data bases				××	××	. <b>* *</b>		

\*NOTE: FY95 RDT&E funding was budgeted within the Air Force under PE 0303144F, Electromagnetic Compatibility Analysis Center (ECAC) which was renamed the Joint Spectrum Center effective 28 Sep 94. Funds and Executive Agent responsibility were transferred from the Air Force to DISA effective FY96, (PE 0303153K); however, they will be transferred back to the Air Force effective FY97.

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RDT&E P	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)	EMENT/PRO	JECT COST B	REAKDOW	N (R-3)		DATE: March 1996	h 1996	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense Wide/07	ACTIVITY			R-1 ITE	R-1 ITEM NOMENCLA Joint Spectrum Center/030	4CLATURE 17/0303153K			
A. Project Cost Breakdown (\$ in Thousands)	usands)				FV06		FVOK	EV07	
Contractor Engineering Support Total Project Cost					6133		4,712 4,712		
B. Budget Acquisition History and Planning Information	anning Information								1 100
Contractor or Contract Government Method/Type Performing or Funding Activity Vehicle IT Research C/CPAF/ Institute MIPR	Award or Obligation Date 17May95	Performing Activity EAC	Project Office EAC	Budget FY95	Budget EY96 4,712	Budget FY97	Budget To Complete Contg	Total Program Contg	
All Other Contracts							·		
	Total Contracts				4,712				
Test and Evaluation Organizations					4,712				****
									(20)
									1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			Page 4 of 4	of 4					

R-1 Shopping List UNCLASSIFIED